

# P M

PROGRAM MANAGER



DAU ALUMNI ASSOCIATION 20<sup>TH</sup> ACQUISITION  
SYMPOSIUM SET FOR JUNE 17-18, 2003

## Implementing Front-End Logistics Support for NASA Program



*Second Generation Reusable Launch  
Vehicle (2GRLV)*

The Second Generation Reusable Launch Vehicle (2GRLV) will replace Space Shuttle as nation's space transportation system.

### **ALSO IN THIS ISSUE:**

**PERFORMANCE-BASED METRIC  
TOOLS FOR PROJECT  
MANAGEMENT**

**DAU DEVELOPS NEW ONLINE  
CONTINUOUS LEARNING MODULES**

**DAU COLLABORATES WITH NASA**

*Program Manager Interviews Deidre Lee, OSD's New  
Director, Defense Procurement & Acquisition Policy*



# PROGRAM MANAGER

Vol XXXII, No.1, DAU 172

Some photos appearing in this publication may be digitally enhanced.

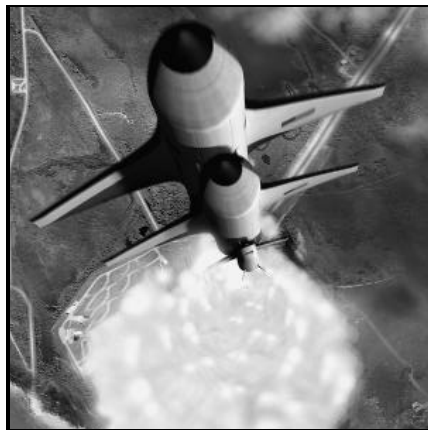


2

## PM Magazine Interviews Deidre Lee

Program Manager Interview

Deidre Lee, OSD's New Director, Defense Procurement & Acquisition Policy, brings her priorities and programs for 2003 and beyond to *Program Manager* readers.

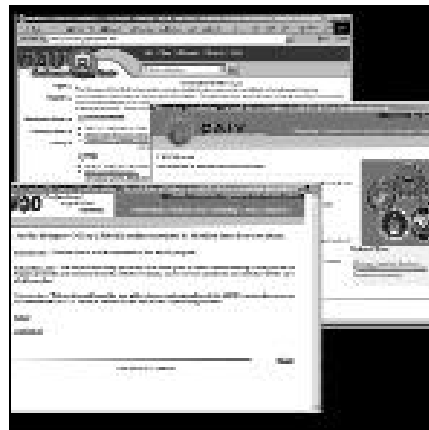


14

## Implementing Front-end Logistics Support for NASA Program

Gary McPherson

Second Generation Reusable Launch Vehicle (2GRLV) will replace Space Shuttle as nation's space transportation system.

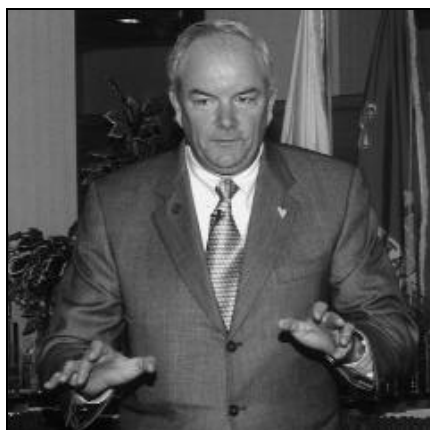


20

## DAU Collaborates with Local Organizations to Create Two New Continuous Learning Modules

Kelly Nieves

Javits-Wagner-O'Day (JWOD) Program and Cost as an Independent Variable are two of DAU's newest online modules.



38

## Transforming Technology, Acquisition, and Sustainment

Leon Reed

The 12<sup>th</sup> Program Executive Officer/Systems Command (PEO/SYSCOM) Commanders' Conference focused on the acquisition warrior—today and tomorrow.



58

## DAU Collaborates with NASA

Todd Post

Sharing stories with like-minded leaders in program and project management



76

## DAU Hosts WACUC Learning Symposium

Sylvia Gasiorek-Nelson

Building Bridges—Pursuing Partnerships.

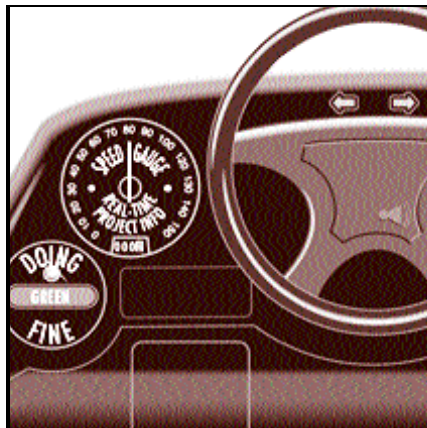


## 26

### Fourth International Acquisition/Procurement Seminar—Pacific (IAPS-P)

Christina Cavoli

Concepts for developing a strong international defense industry.



## 32

### Leveraging Fidelity of Performance-Based Metric Tools for Project Management

Scott S. Haraburda

Newport Chemical Agent Disposal Facility Project Management Team using performance-based metric tools for managing the project's more critical areas.

## ALSO

Legislative Update.....	10
Fifteenth Annual International Acquisition/Procurement Seminar—Atlantic .....	13
DAUAA 20th Annual Acquisition Symposium .....	19
DAU & DMO Sign Statement of Principles.....	35
AT&L Knowledge Sharing System—AKSS .....	37
Defense Honors Manufacturing Technology Achievements .....	37
DAU and University of Alaska Anchorage Sign MOU.....	45
Defense Threat Reduction Agency Supports DAU Coursework.....	54
"Itinerant" Painter Adds 18th Century Charm to DAU Cafeteria .....	56
Pentagon Outlines Missile Defense Program .....	57
Micromanagement Reduction Plan .....	62
Four Defense Leaders Answer Questions in Pentagon Forum .....	64
DAU South Region Reatured in AL&T Magazine.....	65
DAU Adds New R-TOC Module to Continuous Learning Center Web Site.....	65
'04 Budget Request First to Incorporate Bush Priorities.....	66
Acquisition Chief Discusses Transformation.....	67
Navy DACM Retires.....	72
Navy Appoints New Director, Acquisition Career Management .....	73
DAU West Region and DCMA San Diego Form Strategic Partnership .....	80
DAU South Region and HMIRA Form Strategic Partnership .....	82
PSA Honors Terry Little with William J. Perry Award.....	82
DoD Acquisition Office Recognizes Transformational eBusiness Working Group.....	83
New System to Provide Effective Defense for Ships, Sailors .....	85
Surfing the Net .....	87
PM Writer's Guidelines.....	Inside Back Cover



Published for the  
**DEFENSE  
ACQUISITION  
UNIVERSITY**

President

**Frank J. Anderson Jr.**

Commandant

**Col. Ronald C. Flom, USA**

Director, Operations Group

**Col. Ronald J. Hayne, USA**

Director, Visual Arts and Press

**Greg Caruth**

## PROGRAM MANAGER

Managing Editor ..... **Collie Johnson**

Chief, Layout and Design ..... **Paula Croisetiere**

Editor ..... **Sylwia Gasiorek-Nelson**

Letters to the Editor and other correspondence are welcome and may be mailed to the address shown below or sent by e-mail to [colliejohnson@dau.mil](mailto:colliejohnson@dau.mil). Article preparation/submission guidelines are located on the **inside back cover** of this issue or may be downloaded from our Web site at <http://www.dau.mil/pubs/pm/articles.asp>. Inquiries concerning proposed articles can also be made by phone at (703) 805-2892/3364 or DSN 655-2892/3364.

*Program Manager* (ISSN 0199-7114), published bimonthly by the DAU Press, is free to all U.S. and foreign national subscribers. Postage is paid at the U.S. Postal Facility, Fort Belvoir, Va. POSTMASTER: Send address changes to:

**PROGRAM MANAGER  
DEFENSE ACQUISITION UNIVERSITY  
ATTN DAU PRESS STE 3  
9820 BELVOIR ROAD  
FT BELVOIR VA 22060-5565**

To subscribe by mail, send us your request in writing or fill out and mail our convenient postage-free online mailer at [http://www.dau.mil/forms/subscribe\\_form.pdf](http://www.dau.mil/forms/subscribe_form.pdf). To comply with USPS regulations, your request must contain your **original signature**. Faxed signatures are not acceptable.

*Program Manager* is a vehicle for transmitting information on policies, trends, events, and current thinking affecting program management and defense systems acquisition. Statements of fact or opinion appearing in *Program Manager* are solely those of the authors and are not necessarily endorsed by the DoD or DAU. Articles may be reprinted. When reprinting, please credit the author and *Program Manager*.



# PM Interviews Deidre Lee

## OSD's New Director, Defense Procurement and Acquisition Policy

Rob Leibrandt, DAU liaison and policy analyst in the Office of the Director, Procurement and Acquisition Policy, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics), interviewed Deidre Lee on Jan. 22, 2003, to bring her priorities and programs to *Program Manager* readers. Lee now heads an office that combines her former duties as Director of Defense Procurement with the added responsibility of Acquisition Policy.

**Q**

*Ms. Lee, what leadership challenges as well as opportunities for synergy do you see in your new combined responsibility for both Procurement and Acquisition Policy?*

**A**

DPAP has broad responsibility for acquisition policies. Combining these two organizations results in a very talented group of people who will focus their energies on constantly reexamining our policies and procedures for improvement and simplification.

**Q**

*What can be done to improve the effectiveness of the acquisition process through this policy integration effort?*

**A**

We think we need to focus on developing a more integrated approach to acquisition policies. This means coordinating several steps: identifying opportunities for acquisition policy improvements; developing improvements in an open process; preparing for training the acquisition workforce as policy changes are developed; communicating revised policies to people who imple-



Rob Leibrandt, DAU liaison and policy analyst, interviews Deidre Lee, Director, Defense Procurement and Acquisition Policy, OUSD(AT&L), on Jan. 22 in her Pentagon office.

**“We always have to remember that the basic purpose of the acquisition system is to provide for the needs of warfighters; get them what they need, when they need it, at an affordable cost. Our credibility suffers to the extent that we fail to meet this basic responsibility.”**

ment the policy; and monitoring the implementation of revised policies to ensure improvement actually occurs.

In practice, this means that people in DPAP who review acquisition strategies need to communicate problems they identify in acquisition policies and participate in developing policy changes. Also, by conducting more outreach, acquisition professionals in the field will identify problems in our policies that we can address.

The development of revised policies needs to be done in an open, transparent manner. For example, we have started publishing not only our proposed procurement rules but also public comments submitted on the rules. This will shed greater light on all the comments we receive and will hopefully better explain the resolution of the comments.

At the same time that policies are being developed, we will coordinate with the acquisition training community to develop training for the new policies. This will help identify potential implementation problems, but more importantly, means that training will be available for people in the field at the same time that we publish new policies.

Finally, we will monitor the implementation of new acquisition policies. Having responsibility for the full spectrum of improving acquisition policies, including monitoring the implementation of new policies, means that one organization can be held accountable for ensuring the new policies result in a more efficient and effective acquisition process.



*How has your previous position as the Administrator for the OFPP [Office of Federal Procurement Policy] affected your view of Defense procurement? How are they the same and how are they different? What could DoD and the Federal Government learn from each other?*



My previous position at OFPP (as well as my position at NASA) kept me closely



**“One great lesson for us that arises from the events of the last year and a half is the overwhelming need for flexibility...This need for flexibility is pervasive throughout the acquisition process...From their inception, systems have to be developed with the capability to evolve in the face of rapidly changing needs.”**

involved with Defense procurement. As you are aware, OFPP is responsible for procurement policy on a government-wide basis, including DoD. So, I was not unfamiliar with Defense procurement or with the highly regarded professionals involved in working DoD-specific issues. At OFPP, I was conscious of including the views and concerns of the smaller agencies that could be overlooked if one has a predisposition toward DoD based on size alone. I found that the issues facing the civilian agency procurement officials were as equally challenging as those faced by DoD procurement officials.

I am a strong supporter of working issues with my counterparts at the civilian agencies. For example, I am a member of the PEC [Procurement Executives Council], which is comprised of senior procurement executives assigned throughout the Federal Government. Among other things, the PEC is chartered to: create an environment that promotes innovation, empowerment, and risk-taking in accomplishing the government's business; explore methods to streamline and improve existing processes; and share ideas, practices, and experiences among agencies. My involvement with the PEC and the FAR Council ensures DoD is in a position to guide, support, or challenge initiatives that cut across agencies.



*From your perspective as principal advisor to the Under Secretary of Defense for Acquisition, Technology and Logistics on major weapon system contracting strategies and advisor to the Defense Acquisition Board on procurement matters, how has the new threat of international terrorism and the need for rapid deployment affected contracting strategies?*



One great lesson for us that arises from the events of the last year and a half is the overwhelming need for flexibility. We can no longer reasonably expect to be able to predict what the threats will be over an extended period of time, nor can we expect to know precisely what will be needed to counter those threats.

This need for flexibility is pervasive throughout the acquisition process, from requirements generation through acquisition planning, contracting, development, production, and sustainment. From their inception, systems have to be developed with the capability to evolve in the face of rapidly changing needs. We are doing a number of things in AT&L to promote this flexibility.

For several years now, we have been strongly promoting evolutionary acquisition and spiral development. These concepts not only allow better management of technical and cost risk, they

## DEIDRE A. LEE

*Director, Defense Procurement & Acquisition Policy  
Office of the Under Secretary of Defense  
(Acquisition, Technology & Logistics)*

**D**eidre A. Lee assumed her position as Director of Defense Procurement and Acquisition Policy on Nov. 3, 2002. Before assuming this position, she was the Director of Defense Procurement for two years. Lee is responsible for all acquisition and procurement policy matters in the Department of Defense. She serves as the principal advisor to the Under Secretary of Defense for Acquisition, Technology and Logistics and the Defense Acquisition Board on acquisition/procurement strategies for all major weapon systems programs, major automated information systems programs, and services acquisitions.

Additionally, Lee is responsible for the acquisition workforce career development and training as well as AT&L's external electronic business efforts, including support to the Financial Management Modernization Program. She is leading the Department's transformational policy initiatives in the Federal Acquisition Regulation (FAR), Defense FAR Supplement (DFARS), and the DoD 5000-series acquisition regulations. She is DoD's advisor for competition, source selection, multiyear contracting, warranties, leasing, and all international contracting matters.

Prior to joining the Department of Defense, Lee served as the Administrator for the Office of Federal Procurement Policy from July 1998 to June 2000. From March 1993 until July 1998, she served as the Associate Administrator for Procurement at



the National Aeronautics and Space Administration. Prior to that, Lee served as the Deputy Associate Administrator for Procurement and the Executive Officer to the Deputy Administrator of NASA. She rose through the ranks to become NASA's senior acquisition

official and has a distinguished record as a reformer and innovator.

From 1984 until 1990, she worked at the Johnson Space Center, as Chief of the Space Shuttle Procurement Division, Chief of the Orbiter and STS Integration Procurement Branch, and Chief of the Data Systems and Aircraft Operations Branch.

She was awarded NASA's Outstanding Leadership Medal and Exceptional Achievement Medal. In 1996 and 2001, she was a recipient of the Senior Executive Service Presidential Rank Award. In March 2001, Lee received the Honorable Elmer B. Staats Award for Accountability.

Lee began her career with the Department of Defense where she served in various procurement-related positions that included base procurement in Okinawa, Japan; systems acquisition at Hanscom AFB, Mass.; and logistics procurement at Hill AFB, Utah.

She holds a Bachelor's Degree in Business Administration from Central State University, Edmond, Okla., and a Master's Degree in Public Administration from the University of Oklahoma.

preserve the ability of systems to be adapted to changing needs.

More recently, we have undertaken a complete rewrite of the 5000 series of policies. This whole initiative arose from a growing belief that the old 5000 series was too prescriptive and did not provide an environment conducive to innovation and creativity. To a great extent, the documents had come to be used as a "cookbook" for acquisition planning, to the detriment of new, potentially beneficial approaches. It is not true that innovation and creativity were not allowed under the old documents, but it is true that we didn't see much of them, probably because it was hard to be creative and still fulfill all the prescriptions.

So, the approach to the new documents is to remove the prescriptions to the greatest degree possible. The old documents required that acquisition planning meet all statutory requirements and demonstrate in particular ways that the acquisition is planned to best meet the program objectives. The new documents still require that all statutory requirements be met, and demonstrate that the acquisition is planned to best meet the program objectives. It is in the "hows," not the "whats," that the documents truly differ.

The general thrust of this work is to allow the program manager to be innovative, creative, and flexible in planning the program. The old 5000 series was very prescriptive regarding how a PM had to demonstrate that the program had a coherent, intelligent acquisition strategy. The new series allows the PM to demonstrate this in ways best suited to the individual program.

Our expectation is that this flexibility in documentation will further promote the flexibility required throughout the acquisition process. This change will have some profound effects on the acquisition planning process. It will require program managers to really think through their strategies, not just complete a checklist of documents. It will also require better and earlier coordination between programs and the MDA [Milestone Decision Authority] staffs, so

strategies will be well understood ahead of time and not derailed late in the game. Finally, the changes will require some changes in the way MDA staffs evaluate strategies, forcing a renewed focus on the real content of the strategies, not just their form.

**Q**

*The aging workforce is a topic affecting DoD's corporate knowledge base. How do we revitalize the remaining workforce and attract highly qualified replacements with the right skills?*

**A**

President Bush has said that we need to get the right workforce with the right skills at the right place with the right pay. We are working on all these areas to address our aging workforce.

**Right Workforce.** We are using Human Capital Strategic Planning to look at the workforce we have today, the workforce we need in the future, and the actions we need to take to get from here to there.

**Right Skills.** We have transformed the Defense Acquisition University to take our training to where our customers are; we are in the midst of transforming the certification training for each of the AT&L disciplines, concentrating on PM, Contracting, and Logistics; we are examining how to recognize commercial professional certifications (such as those given to logisticians, project managers, and contracting officers) so that we can attract people from industry at the journeyman level.

**Right Place.** We are piloting a branding campaign at Edwards Air Force Base to attract, hire, and retain people so we can replace those who have served us so well and have earned their retirement. We will use the knowledge we gain at Edwards to expand the campaign Department of Defense-wide.

**Right Pay.** The Acquisition Workforce Demo has developed and implemented a pay-for-performance system along with pay bands. We plan to expand the Demo to the entire DoD-wide AT&L workforce.



**“My goal for DPAP is to facilitate the innovativeness of the people in the field. We want to hear their ideas and concerns and take action. The biggest plus is that we can change things—the minus is the time it often takes to make these public policy changes.”**

**Q**

*Your new organization directs the Defense Acquisition Regulations Council and develops policy for contract pricing and financing, contract administration, international contracting, and training of contracting personnel. What policy improvements have been made recently? What can we expect in the future?*

**A**

Within the past few months, we've issued a number of changes to the FAR [Federal Acquisition Regulation] and the DFARS [Defense Federal Acquisition Regulation Supplement] that are geared toward improving the way we do business. Some of these changes include: strengthening of requirements for competition in the placement of orders for services under Federal Supply Schedules and other multiple award contracts;

adoption of “best value” procedures for the acquisition of commercial software and related services through the use of Enterprise Software Agreements with contractors who offer favorable terms and pricing; providing foreign military sales customers more visibility into the development of contracts that we award on their behalf; and exception from the Buy American Act for acquisitions of U.S.-made end products in acquisitions subject to the Trade Agreements Act.

Some of the changes that we're presently working on include: requirements for contractors to submit, and DoD to process, all payment requests electronically; and requirements for more upfront review of acquisition strategies to prevent unnecessary or unjustified contract bundling. We've also initiated a DFARS “transformation” project, which will involve a comprehensive review of the DFARS to identify opportunities for reducing procurement cost, cycle time, and administrative burden. We're planning an aggressive schedule for completion of the review and for subsequent use of the results to transform the DFARS into a more effective document.

A lot of our current work in the International area is focused on Domestic preferences in one way or another. Let me say right off that we do not oppose any of the current statutes per se. We are interested, however, in clarifying some aspects of the statutes and in getting some flexibility into the process. Also, through the establishment of reciprocal MOUs with individual countries, we are working to open up trade in Defense in both directions. We expect that these efforts will promote interoperability and standardization, increase competition, and increase U.S. access to foreign markets.

**Q**

*You often say that Defense Procurement “works” for the field contracting officer. What tools and policies are working? What is still needed?*

**A**

Communication is key—we want to make things better for our people in the



field. Working on the right things—issues of importance to them. The first step is outreach. An example of our virtual outreach program is the new Defense Procurement and Acquisition Policy Web site [<http://www.acq.osd.mil/dpap>]. The site contains links to *Acquisition Today*, which provides real-time notice of policy changes that affect field personnel. Personnel can sign up to automatically receive the notices. About 85,000 people receive notices this way.

In addition to this virtual presence, the DPAP staff maintains a very robust speaking schedule that is not limited to the Washington D.C., local area. Every year we try to reach out to acquisition and contracting personnel worldwide. At each speaking opportunity we ask the audience to describe any barriers that prevent them from doing their jobs. Those become action items for DPAP staff—and the field activity gets an answer back as to what we are going to do about eliminating the perceived barrier.

The last outreach and communication area that I want to mention today is ensuring all new initiatives are clearly communicated to field activities via organized, structured, focused presentations. We have begun writing training materials at the same time that changes in acquisition rules are developed, with the intent of having good training modules ready for deployment when the rule changes become final. We have established quite a portfolio of free online training modules that are available at the continuous learning DAU Web site [[http://clc.dau.mil/kc/no\\_login/portal.asp](http://clc.dau.mil/kc/no_login/portal.asp)]. These modules are available to anyone, including our industry counterparts!

In order to ensure that the training materials resonate with the field personnel, we are in the process of conducting focus groups to understand how to better describe the impact of the changes and how to better connect with mid-level personnel who have completed their basic training courses.

Continuous feedback from our customers is vital to ensure that we pro-

vide effective and timely training—thus fulfilling our goal of having the best trained contracting and acquisition workforce in the world. A well trained workforce with the right business tools at their fingertips is vital for ensuring our soldiers, sailors, airmen, and Marines get the most out of every defense dollar.

**Q**

*If we recognize that Defense industry deserves to make reasonable profits, how can the acquisition process be improved to increase the attractiveness of the government as a customer? What is a reasonable profit and who decides that?*

**A**

When discussing contractor profit, it is important to remember that about two-thirds of what we buy is bought competitively. We are also relying more and more on commercial items to fulfill our needs. For competitive and commercial items, we rely on the marketplace to generate fair and reasonable prices. Contractors are assumed to have priced a reasonable profit into their prices, based on market conditions. Thus, for competitive and commercial items, we don't examine costs and profit; instead, we look at price.

For the remaining sole-source, non-commercial items, we employ a structured profit policy that is designed to ensure an integrated assessment of the business, technical, and financing risks associated with each contract. It provides contracting officers with a structured way to consider profit by focusing on the factors that DoD believes are most appropriate for each contract. We have made adjustments to those factors over the years when necessary to address changed conditions in the defense industrial base. For example, in the year 2000 we introduced a technical risk factor that allows contracting officers to recognize higher profit objectives for those contractors that are incorporating state-of-the-art technology into our requirements.

In the past, since profit objectives are based on costs, when a contractor pro-

posed a reduced cost base we often reduced our profit objective. This made no sense. In effect, we punished the contractor for becoming more cost-efficient.

We therefore revised our profit policy about a year ago to create a new cost-efficiency factor that enables contracting officers to increase profit objectives by up to an additional four percent for contractors who have a proven track record of reducing costs. We also increased the relative weight we accord to the technical and management risks associated with contract performance. These adjustments to our profit policy will enable us to retain and attract vendors capable of addressing our need to obtain cutting-edge technology at prices we can afford.

**Q**

*The Honorable Edward C. "Pete" Aldridge, Under Secretary of Defense for Acquisition, Technology & Logistics, outlined five major goals for acquisition. In your opinion, on his first goal, how can we show Congress that we are credible and effective in executing the acquisition and logistics process? Where have we failed in the past and where can we do better?*

**A**

We always have to remember that the basic purpose of the acquisition system is to provide for the needs of warfighters; get them what they need, when they need it, at an affordable cost. Our credibility suffers to the extent that we fail to meet this basic responsibility.

There are a number of things being done that greatly enhance our prospects for success. One of these is the emphasis on evolutionary acquisition and spiral development. We all know the old saying, that "better is the enemy of good enough." Through evolutionary acquisition we can provide significant capabilities sooner, rather than not providing anything until all of the Weapon Systems requirements are met. Risk management and cost estimating are also enhanced.

Along these lines, we are now insisting on using the most realistic cost estimates



available for budgeting purposes, so that programs will have the resources necessary to succeed. There is one other very important thing we could do to help programs succeed; impart real stability to the program. This applies in two areas—cost and requirements. Once a program is on contract, we should insist that the Services fund it as initially planned. This would at least allow the program a fighting chance at performing as expected.

Similarly, requirements changes should be severely restricted, at least within an ongoing spiral. Rather than disrupting ongoing development efforts, emerging requirements should be held for the next spiral. There is wide agreement that these initiatives will greatly improve our ability to execute acquisition programs more successfully. However, problems do arise in practice. Due to heavy demands on scarce resources, there is always a temptation to take money out of a program for other uses. We must maintain strong discipline in resisting these temptations.



*Secretary Aldridge's fifth goal aims to leverage technologies to "create the warfighting capabilities, systems, and strategies of the future." Can you describe efforts you and your staff are making to help the acquisition community support this goal?*



My staff is working hard to address this goal. To transform how the Department acquires weapon systems, goods, and services to support warfighting strength, technological capabilities and efficiencies must be brought to bear to a far greater degree than in the past. Electronic business or eBusiness implements business technologies and transforms business processes. The Under Secretary of Defense for Acquisition, Technology and Logistics directed the establishment of an eBusiness office within AT&L to be the engine of change. The eBusiness office focus will be twofold—external and internal.

The external focus eBusiness office, under my purview, will lead the trans-



**“My office is pursuing expanding our central referral system for open critical acquisition positions in OSD and the Defense Agencies...to all acquisition, technology, and logistics positions DoD-wide. We are also looking at several different intern and rotational programs to provide developmental opportunities across the Department.”**

formation of the acquisition/procurement business environment of the AT&L enterprise and external business partners through electronic business governance, the application of technology, and alignment within the Department's business modernization programs and within CIO [Chief Information Office] initiatives. The office will support the President's Management Agenda and eGovernment initiatives, including the Federal Acquisition environment. It will establish:

- eBusiness guidelines and standards to create an accessible, efficient, effective, seamless, and collaborative acquisition process.
- The governance of eBusiness across the DoD acquisition community to support the integrated acquisition end state and the forthcoming Federal Management Enterprise Architecture.
- The review, approval, and enforcement of standards, constraints, guidelines, processes, and products for use within the acquisition community.

Much of the effort required of the acquisition, technology and logistics workforce in supporting this goal involves understanding what tools, programs, and policies are already in place to help them. There are a number of tools that we have fielded under eBusiness.

The Standard Procurement System is one that we are working hard to improve while we continue to implement it. Wide Area Workflow is a tool for electronic invoicing that helps speed the process of paying vendors for goods and services that they have delivered. Beyond these examples of tools that directly help our people in the field, we have several projects that operate behind the scenes making the eBusiness systems work better. Everything we do is oriented to supporting our workforce.

In early November last year, my staff jointly conducted a workshop with the Director, Defense Research and Engineering called “Leveraging Technology in an Evolutionary Acquisition Environment.” The workshop objectives were to obtain feedback from DoD and industry participants on the draft version of our soon-to-be-published guide, *A Managers Guide to Technology Transition in an Evolutionary Environment: A Contact Sport*, and to identify and develop recommended actions addressing significant issues associated with the technology transition process.

The workshop was a huge success and the guide was published on Jan. 31, 2003. An outreach and communication strategy was developed and training objectives targeted as follow-on efforts to

support the release of the guidebook and further help the workforce. There is a great deal of interest in the technology transition area, and we are committed to supporting the workforce with the tools necessary to help make the process better.

**Q**

*Secretary Aldridge mentions access to better training opportunities and more movement among the Services and between the field and headquarters staffs as being keys to success. Would you care to comment on your role in this?*

**A**

I am working closely with DAU to ensure that our training products are global in their reach and focused on career-long learning. We coordinate the education of over 129,000 students worldwide. DAU has responded and has forward-deployed over 260 faculty positions into five regions near our customers' work centers. The university has also established strategic partnerships with over 44 organizations, institutions, and private associations to help meet customer total learning needs.

DAU is now providing targeted performance support with subject matter expertise to major weapon system program offices such as: Joint Strike Fighter, Future Combat System; DD-X; Precision Munitions; and Missile Defense. Technology has not only expanded the reach of training, but also enabled the AT&L community to have access to some 40 continuous learning modules, numerous communities of practice linking experts and best practices, and an AT&L Knowledge Sharing System (AKSS). All of these have become integral parts of our total learning solutions in support of the learning needs of the workforce.

For years DAU has provided certification and assignment-specific training for our workforce. That training has been successful—and DAU is building on that success by moving to emphasize critical thinking skills and case-based training. But, we need to go beyond certification to provide Web-based continuous learning so that our work-



**“The old 5000 series was very prescriptive regarding how a PM had to demonstrate that the program had a coherent, intelligent acquisition strategy. The new series allows the PM to demonstrate this in ways best suited to the individual program. Our expectation is that this flexibility in documentation will further promote the flexibility required throughout the acquisition process.”**

force, both those who have been certified and those who are not in certification disciplines, can keep current with the Department's emerging policies and new initiatives.

My office is responsible for developing some of that continuous learning training as part of our outreach and communication process. In addition, my office is pursuing expanding our central referral system for open critical acquisition positions in OSD and the Defense Agencies (where employees can see po-

sitions in other agencies and apply for those positions) to all acquisition, technology, and logistics positions DoD-wide. We are also looking at several different intern and rotational programs to provide developmental opportunities across the Department.

**Q**

*Secretary Rumsfeld often says that preparing for the future requires transforming the operational force and the way it operates. Is it necessary to transform the existing acquisition workforce to be successful in the transformed future Rumsfeld foresees, and if so how do we determine the new skill requirements?*

**A**

Today's acquisition workforce is dedicated and talented, and everyone recognizes that changing mission and program requirements associated with transformation impact the capabilities needed in the future workforce. The forecast of increased retirements during the next five years exacerbates the impact. We view the intersection of these two events as an opportunity to shape the acquisition workforce to add even greater value to the changing missions and programs.

Two years ago, we began focusing leadership attention and resources on human capital strategic planning—the component of organizational strategic planning that focuses on the workforce. Human capital strategic planning enables leaders to identify the workforce capabilities (characteristics such as occupations, academic disciplines, and level of experience; behaviors, such as innovation and risk-taking; and values, such as willingness to take risks, and fortitude to speak truth to power) that the leaders believe their organizations need to accomplish their mission or programs—their strategic intent; and contrast the future desired distribution of the needed capabilities in the workforce with the current inventory projected into the future, assuming continuation of current human resource management policies and practices. That comparison enables them to identify gaps between what they need and what they will have by default.

Finally, human capital strategic planning identifies an aligned set of human resource management policies and practices, and resources and authorities that leaders believe will close the gaps and produce the workforce they need to accomplish their strategic intent. We call this a business case analysis of the workforce needed to accomplish the leaders' strategic intent. Human capital strategic planning is a radical departure from the way we do the people business today, and we are in the early developmental stages of a time-phased plan to develop a mature human capital strategic planning capability.

**Q** *Secretary Rumsfeld expects the Department to develop a culture of innovation—a willingness on the part of commanders and subordinates to take risks and try new methods and ideas to be successful in the future. What is being done to develop this culture of innovation within the acquisition workforce?*

**A** Changing culture is one of the most difficult leadership challenges. It is particularly difficult for a large and complex organization like the Department of Defense. As I mentioned earlier, we are focusing leadership attention on human capital strategic planning, and cultural shaping is one aspect of it. Again, this is a new organizational activity and we are in the early developmental stages on a long path to developing a mature human capital strategic planning capability.

Our time-phased plan focuses on identifying the competencies needed to conduct cultural shaping and developing those competencies in small teams next year. Developing a culture of innovation will require extensive, unrelenting senior leadership attention and devoted resources.

**Q** *Are you expecting any legislative changes that will help the DoD AT&L community?*

**A** We have several very bold legislative proposals and a supportive leadership.

They have not yet been cleared, so I cannot discuss them in detail. These proposals are designed to increase flexibility by minimizing prescriptive practices, encouraging innovative solutions by our acquisition professionals, and rewarding success. Stay tuned.

**Q** *You rose through the ranks to become NASA's senior acquisition official and you have a distinguished record as a reformer and innovator. What has allowed you to be a successful innovator and reformer and what are the pluses and minuses of this role?*

**A** I thoroughly enjoy my contracting career. Working in a number of different locations on a broad array of programs was a terrific opportunity. I cannot tell you the number of times something would come across my desk and I would ask, "Why do we do this?" and the answer was less than satisfying—"That's the way it's always been done," or "See the 1969 memo." Yet, I quickly learned that these things could be changed, and a proactive contracting officer could really make a difference.

My goal for DPAP is to facilitate the innovativeness of the people in the field. We want to hear their ideas and concerns and take action. The biggest plus is that we can change things—the minus is the time it often takes to make these public policy changes.

**Q** *What can DAU do to better serve the needs of the DoD AT&L community?*

**A** DAU is providing learning resources 7 days a week, 24 hours a day—the concept of anytime, anywhere learning or getting the right information to the right employee at the right time. This concept helps new employees gain job-critical skills and provides current employees with the new skills necessary to meet the challenges of tomorrow.

DAU re-engineered its curricula to take advantage of today's e-learning practices and technology. They have optimized

certification training, performance support, communities of practice, and continuous learning opportunities. DAU is now transforming Contracting training to provide the right mix of case-based training and critical thinking to replace "cookbook" answers.

Through the CLC [Continuous Learning Center], DAU provides a "toolbox" of electronic performance support that provides access to the "right" knowledge to perform in a rapidly changing workplace with flexible and adaptable solutions.

In FY 2003, DAU is reengineering its logistics and sustainment curriculum along the tenets of the FLE [Future Logistics Enterprise]. This reengineered logistics curriculum will not only benefit the logistics workforce but is intended for incorporation in other workforce areas, particularly program management, contracting, systems engineering, and business and financial management. FLE advancement and DAU logistics curriculum reengineering go hand-in-glove. DAU is moving out rapidly on new initiatives, particularly in assisting the acquisition workforce to implement the new DoD 5000 policy on total life cycle systems management and performance-based logistics.

**Q** *What is the best piece of career development advice you were ever given?*

**A** Be flexible, mobile, and energetic. Knowing the rules is certainly necessary, but not sufficient. Focus on the end result and work well with others to ensure success.

**Q** *What do you hope will be your legacy?*

**A** I hope my legacy will be an acquisition workforce recognized for their business excellence.

Editor's Note: To learn more about DPAP's activities and programs, visit the new DPAP Web site at <http://www.acq.osd.mil/dpap>.



# LEGISLATIVE UPDATE

## Highlights of the National Defense Authorization Act for Fiscal Year 2003

### Acquisition Policy and Related Matters

**T**he National Defense Authorization Act for FY2003, Public Law 107-314 at <http://www.congress.gov/cgi-bin/query/z?c107:H.R.4546.ENR>: provides authorizations of appropriations totaling \$392.8 billion for national defense functions: DoD procurement; Research, Development, Test and Evaluation (RDT&E); Operations and Maintenance (O&M); working capital funds; Military Construction (MILCON) and Family Housing; and for Department of Energy (DoE) weapons and environmental restoration programs. (Also, see House Report 107-772 at <http://www.navair.navy.mil/clo/congressional.cfm?document-type=Committee%20Reports>.)

- Section 242.** Technology Transition Initiative
- Section 243.** Defense Acquisition Challenge Program.
- Section 314.** Procurement of Environmentally Preferable Procurement Items.
- Section 801.** Buy-to-Budget Acquisition of End Items.
- Section 802.** Report to Congress on Evolutionary Acquisition of Major Defense Acquisition Programs.
- Section 803.** Spiral Development Under Major Defense Acquisition Programs.
- Section 804.** Improvement of Software Acquisition Practices.
- Section 806.** Rapid Acquisition and Deployment Procedures.
- Section 807.** Quick-Reaction Special Projects Acquisition Team.
- Section 818.** Timing of Certification in Connection with Waiver of Survivability and Lethality Testing Requirements.
- Section 820.** Revisions to Multiyear Contracting Authority.
- Section 822.** Independent Technology Readiness Assessments.

- Section 901.** Under Secretary of Defense for Intelligence.
- Section 902.** Reorganization of the Office of the Secretary of Defense for Administration of Duties Relating to Homeland Defense and Combating Terrorism.
- Section 911.** Oversight of Acquisition for Defense Space Programs.
- Sections 922.** Quadrennial Defense Review (QDR)
- Section 923.** Delegation of OSD-Managed Programs to the DoD Components. (see report language).

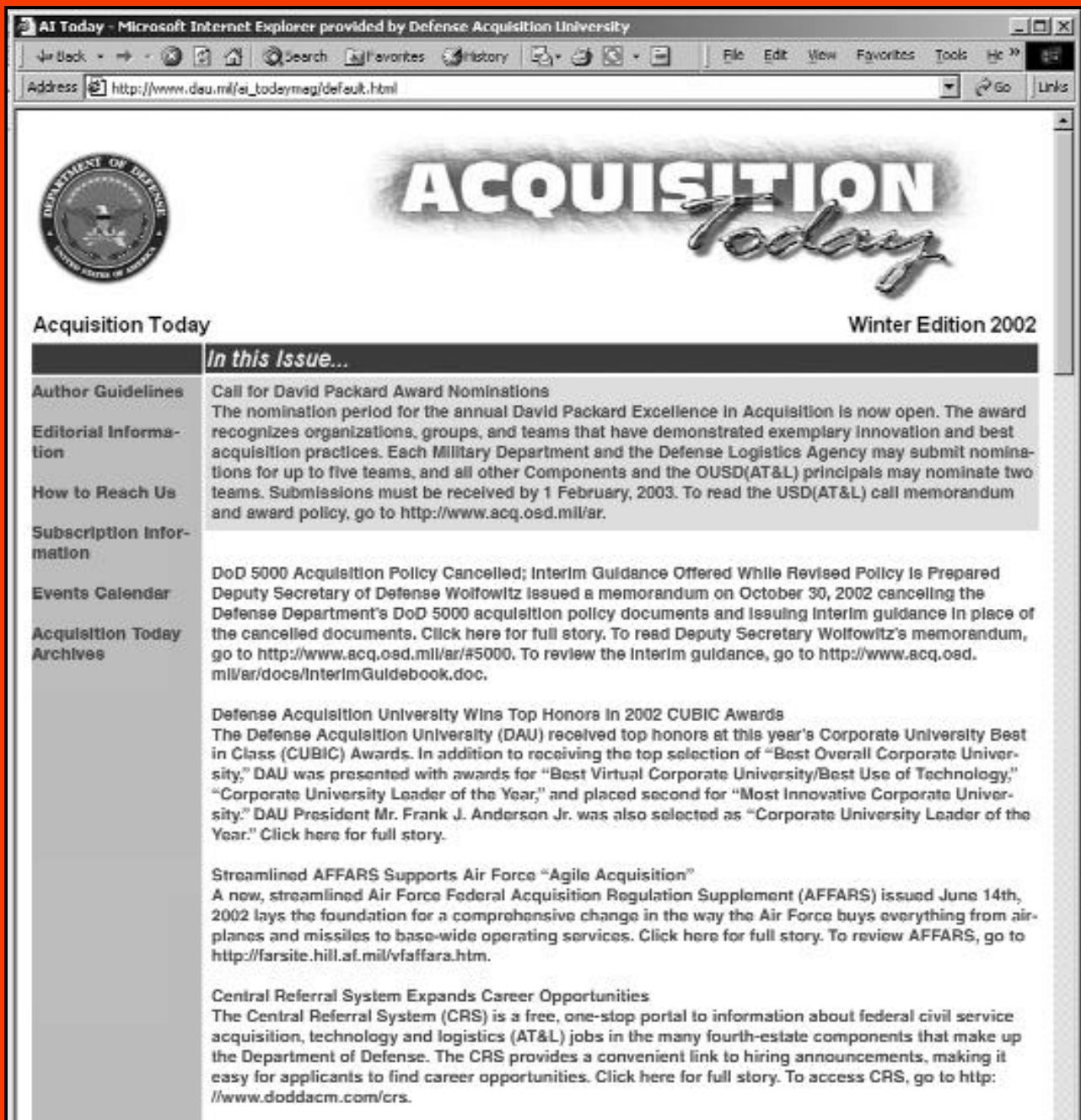
**P**ublic Law 107-248, is the DoD Appropriations Act for FY2003, at <http://www.defenselink.mil/dodge/lrs/> or <http://www.congress.gov/cgi-bin/bdquery/z?d107:h.r.05010>. (Also, see House Report 107-732 at [http://thomas.loc.gov/cgi-bin/cp-query/R?cp107:FLD010:@1\(hr772\)](http://thomas.loc.gov/cgi-bin/cp-query/R?cp107:FLD010:@1(hr772)).)

- Section 8077.** Denies use of FY03 funds to approve or license the sale of the F-22 advanced tactical aircraft to any foreign government.
- Section 8088.** Registering of DoD Financial Mission Critical or Mission Essential Management. Information Systems and Compliance of Those Systems with the Department's Financial Management Modernization Plan.
- Section 8118.** Limitation on Navy-Marine Corps Intranet.
- Section 8121.** Non-Line of Sight (NLOS) Cannon Capability for Army's Objective Force.

# CHECK OUT THE LATEST ISSUE OF *ACQUISITION TODAY* OSD'S ONLINE NEWSLETTER

Complete issues of OSD's online newsletter *Acquisition Today* and previous issues of its predecessor publication, *AR Today*, dating back to 1996, are now posted to the Defense Acquisition University Web

site at [http://www.dau.mil/ai\\_today-mag/default.html](http://www.dau.mil/ai_today-mag/default.html). The online abstract shown here represents topics of interest from the latest issue of *Acquisition Today*.



**Acquisition Today** Winter Edition 2002

	<i>In this Issue...</i>
Author Guidelines	<b>Call for David Packard Award Nominations</b> The nomination period for the annual David Packard Excellence in Acquisition is now open. The award recognizes organizations, groups, and teams that have demonstrated exemplary innovation and best acquisition practices. Each Military Department and the Defense Logistics Agency may submit nominations for up to five teams, and all other Components and the OUSD(AT&L) principals may nominate two teams. Submissions must be received by 1 February, 2003. To read the USD(AT&L) call memorandum and award policy, go to <a href="http://www.acq.osd.mil/ar">http://www.acq.osd.mil/ar</a> .
Editorial Information	
How to Reach Us	
Subscription Information	
Events Calendar	<b>DoD 5000 Acquisition Policy Cancelled; Interim Guidance Offered While Revised Policy Is Prepared</b> Deputy Secretary of Defense Wolfowitz issued a memorandum on October 30, 2002 cancelling the Defense Department's DoD 5000 acquisition policy documents and issuing interim guidance in place of the cancelled documents. Click here for full story. To read Deputy Secretary Wolfowitz's memorandum, go to <a href="http://www.acq.osd.mil/ar/#5000">http://www.acq.osd.mil/ar/#5000</a> . To review the interim guidance, go to <a href="http://www.acq.osd.mil/ar/docs/InterimGuidebook.doc">http://www.acq.osd.mil/ar/docs/InterimGuidebook.doc</a> .
Acquisition Today Archives	<b>Defense Acquisition University Wins Top Honors in 2002 CUBIC Awards</b> The Defense Acquisition University (DAU) received top honors at this year's Corporate University Best in Class (CUBIC) Awards. In addition to receiving the top selection of "Best Overall Corporate University," DAU was presented with awards for "Best Virtual Corporate University/Best Use of Technology," "Corporate University Leader of the Year," and placed second for "Most Innovative Corporate University." DAU President Mr. Frank J. Anderson Jr. was also selected as "Corporate University Leader of the Year." Click here for full story.
	<b>Streamlined AFFARS Supports Air Force "Agile Acquisition"</b> A new, streamlined Air Force Federal Acquisition Regulation Supplement (AFFARS) issued June 14th, 2002 lays the foundation for a comprehensive change in the way the Air Force buys everything from air planes and missiles to base-wide operating services. Click here for full story. To review AFFARS, go to <a href="http://farsite.hill.af.mil/vfaffars.htm">http://farsite.hill.af.mil/vfaffars.htm</a> .
	<b>Central Referral System Expands Career Opportunities</b> The Central Referral System (CRS) is a free, one-stop portal to information about federal civil service acquisition, technology and logistics (AT&L) jobs in the many fourth-estate components that make up the Department of Defense. The CRS provides a convenient link to hiring announcements, making it easy for applicants to find career opportunities. Click here for full story. To access CRS, go to <a href="http://www.doddacm.com/crs">http://www.doddacm.com/crs</a> .

#### Recruiting, Hiring and Retaining a Workforce: Two Successful Approaches

Two DoD organizations are successfully replenishing a shrinking workforce. Click here to read how the U.S. Army Tank-automotive and Armament Command (TACOM) – Armament Research, Development, and Engineering Center (ARDEC), and the Naval Air Systems Command (NAVAIR) have implemented successful hiring and retention strategies. Click here for full story.

#### Training and Guidance Opportunities:

##### DAU CLC Offers Mandatory Government Purchase Card Training Online

The Defense Acquisition University (DAU) Continuous Learning Center (CLC) is offering a new continuous learning online module, "DoD Government Purchase Card Tutorial," to provide the DoD workforce convenient access to the mandatory training.

Click here for full story. To access this module, go to the DAU CLC Web page at <http://clc.dau.mil>.

##### Defense Packaging Requirements Available In New Online Guide

A new draft guidebook, Integrated DoD Guide to Performance-Based Packaging Practices, is available at <http://www.acq.osd.mil/ar/ar.htm#randdpackaging>. The guide offers a consolidated resource for information and guidance on all DoD packaging requirements, with a focus on integrating commercial practices into defense packaging requirements. Click here for full story.

##### New Guide Teaches Principles of Performance-Based Services Acquisition

A new web-based guide, Seven Steps to Performance-Based Services Acquisition, is now available as a training tool and reference on performance-based acquisition for the DoD acquisition, technology and logistics (AT&L) community. Click here for full story. To review the online guide, go to [www.acqnet.gov](http://www.acqnet.gov); from the homepage, click "New Government-wide Site." The guide is located under "Acquisition Best Practices."

#### AcqDemo Corner:

##### AcqDemo Corner: Pay Pool Process Explained

Attendants at a recent AcqDemo Pay Pool Managers Workshop participated in training provided by members of the DoD Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo) Project Office staff. Pay pool members addressed pay pool structures, the Contribution-based Compensation and Appraisal System (CCAS), pay pool panel responsibilities, and panel activities. Click here for full story. To learn more about CCAS, pay pools, and the AcqDemo project, go to [http://www.acq.osd.mil/acqdemo/new\\_site/training/default.html](http://www.acq.osd.mil/acqdemo/new_site/training/default.html).

##### "Leadership" and "Return on Investment" Themes Dominate September 2002 Pay Pool Managers Meeting

The AcqDemo Program Office sponsored a Pay Pool Managers Workshop to bring together a cross-section of pay pool managers to exchange best practices and to explore strategies the program can pursue to improve the overall DoD Civilian Acquisition Workforce Personnel Demonstration (AcqDemo) project. The workshop focused on the need for pay pool managers to provide leadership for the program and isolate specific return on investment contributions from employees. Click here for full article. To learn more about AcqDemo programs, go to [http://www.acq.osd.mil/acqdemo/new\\_site/training/default.html](http://www.acq.osd.mil/acqdemo/new_site/training/default.html).

#### Career Corner:

Professional and career changes are taking place in the acquisition, technology and logistics workforce to meet the evolving needs of the workplace. This edition of Acquisition Today focuses on changes in three areas:

**Logistics Career Field:** The re-engineering of the logistics curriculum at Defense Acquisition University (DAU) is underway. Click here for full article.

**Science & Technology Manager:** A new career field, the Science and Technology (S&T) Manager, is now recognized. Click here for full article.

**Facilities Engineering Career Field:** The Facilities Engineering Career Field (FECF) has been created in response to the complex and evolving nature of DoD installations and facilities. Click here for full article.

##### Army Transformation Industrial Base Study

The Defense Contract Management Agency (DCMA) will help the Army conduct a comprehensive industrial assessment for the Objective Force Industrial Base Strategy. Click here for full story.

##### Earned Value Management (EVM) Process Councils Lead to Process Excellence

The implementation of EVM Process Councils has resulted in measurable process improvements for defense contractor Northrop Grumman. Click here for full article.

##### Upcoming Events for the DoD AT&L Workforce

Two upcoming events, the February AIAA Defense Excellence 2003 Conference and the April 2003 National Small Business Innovation Research (SBIR) Spring Conference are featured. Click here for more information. For a look at what other events are upcoming, check out our calendar at [http://www.dau.mil/ai\\_todaymag/calendar.doc](http://www.dau.mil/ai_todaymag/calendar.doc)



# Fifteenth Annual International Acquisition/Procurement Seminar — Atlantic (IAPS-A)



June 23-27, 2003

Sponsored by the International Defense Educational Arrangement (IDEA)

to be held at the

Defense Acquisition University/Defense Systems Management College (DAU/DSMC)

## THEME

*Interoperability in the International Environment*

For further information, contact any member of the DAU-DSMC IDEA Team: (703) 805-5196

or

Visit our Web site:

<http://www.dau.mil/international/international.htm>

**T**he Fifteenth Annual Acquisition/Procurement Seminar—Atlantic (IAPS-A) will be a theme-based format, to include an industry day; will provide for your individual participation; and will provide for positive information exchange and feedback. The theme for this year's seminar is "Interoperability in the International Environment."

The seminar is sponsored by the International Defense Educational Arrangement (IDEA), which consists of defense acquisition educational institutions in the United States, the United Kingdom, Germany, France, and Spain.

Those eligible to attend are Defense Department/Ministry and defense industry employees from the five sponsoring nations who are actively engaged in international defense acquisition programs. Other nations may participate by invitation.

This year's seminar will be held June 23-27, 2003, at DAU/DSMC, Fort Belvoir, Va. The last day of the seminar, June 27, will be dedicated to the educational aspects of international acquisition.

The IAPS-A is by invitation only. Those desiring an invitation who have not attended past international seminars should submit a letter of request, on government or business letterhead, to DSMC by fax (703-805-3175).

To register, visit the seminar Internet Web site at <http://www.dau.mil/international/international.htm>.

Invitations, confirmations, and administrative instructions will be issued after May 1, 2003.

Contact an IDEA Team member for additional seminar information:

**Comm (U.S.):**  
(703) 805-5196

**E-Mail:** [internationalseminars@dau.mil](mailto:internationalseminars@dau.mil)

# Implementing Front-end Logistics Support for NASA Program

## Second Generation Reusable Launch Vehicle (2GRLV) Will Replace Space Shuttle as Nation's Space Transportation System

GARY MCPHERSON

**R**ecently, I had an opportunity to observe first hand implementation of front-end logistics support within the Second Generation Reusable Launch Vehicle (2GRLV) program at the National Aeronautics and Space Administration (NASA) Marshall Space Flight Center (MSFC). NASA could be considered a sister Service since it was spun off from the Army and they do business much like the Department of Defense. My observations on the 2GRLV program follow. I hope that these may be of use to Army program managers as well as the acquisition logistics community at large.

### A Replacement for the Space Shuttle

The introduction to NASA's Integrated Space Transportation Plan states, "The overall goal of the 2GRLV program is to substantially reduce technical and business risk associated with developing safe, affordable, and reliable RLVs." The 2GRLV program is currently in the Systems Engineering and Requirements Reduction phase. The program office is developing key technologies in several major areas such as propulsion, airframe, and flight mechanics. Major activities in each of the technology areas include developing models, conducting architectural trade studies, and evaluating dif-



NASA-developed artist's concept of the Second Generation Reusable Launch Vehicle (2GRLV).

Photo courtesy NASA

*McPherson is in the Army Acquisition Corps Competitive Development Group currently on assignment as the Engine Product Lead, Project Management, Cargo Helicopters, Redstone Arsenal, Ala. He is a certified professional logistician and holds a master's degree in Manufacturing Technology from Eastern Kentucky University.*

ferent concepts. All these activities emphasize minimizing life cycle cost.

Three major contractors will present their system concepts for evaluation in mid-2003. These system concepts must

address not only the launch vehicle, but all the resources required to support operation and sustainment of the vehicle such as processing facilities, flight operations, and fleet size. Although the contractors have been given maximum

freedom to create radically different concepts, the most likely concept seems to be a two stage to orbit, fly-back vehicle. New reusable kerosene first-stage engines are receiving some attention.

The selected concept will be used as the baseline for developing a replacement system for the current Space Transportation System (commonly known as the Space Shuttle). NASA is working closely with the U.S. Air Force to identify areas for partnership in the 2GRLV program.

### Key Performance Parameters

As with the Department of Defense, NASA has experienced a significant amount of "belt tight-



Dennis E. Smith, manager of the Second Generation Reusable Launch Vehicle (2GRLV) Project Office at NASA's Marshall Space Flight Center. Photo courtesy NASA Marshall Space Flight Center

ening" in its budgets. Thus, emphasis has been placed on minimizing operating and support costs for all programs. From the start of the requirements generation process, the 2GRLV program has placed high priority on system supportability. The 2GRLV program charter, requirements document, and system management plan all place life cycle

cost and launch availability as key performance parameters. From the inception of the program, by assembling and supporting the RMS Working Group, the program office acknowledged the importance of applying an integrated Reliability, Maintainability, and Supportability (RMS) engineering and analysis approach.

On the other hand, some program elements remain that could benefit from a tutorial on RMS and its extensive influence on system availability and life cycle cost, particularly in light of the fact that failure to meet the program objectives in these areas could be the basis for canceling the 2GRLV program.

### RMS Analysis

The RMS Working Group has clearly demonstrated a firm grasp of the RMS disciplines, processes, and tools. This tightly knit team is planning and performing RMS analysis early on, often referred to as front-end analysis. The group's goal is to determine the expected reliability of the system, the projected maintenance requirements, and resultant support structure (repair levels, spares, support equipment, facilities, etc.).

Taking a proactive stance, the RMS Working Group has moved aggressively to develop an advanced RMS modeling and analysis capability. They also have established top-level RMS requirements that supported achieving the program goals, while still giving the competing system contractors maximum freedom to propose their system concepts.

In addition, the group has identified the RMS-related data products that would be needed to properly evaluate and compare these system concepts. Taking their efforts still further, they have also determined RMS analysis and evaluation tasks, identified required input data, and specified desired outputs.

Besides conducting a thorough investigation of available software tools needed to support the RMS analyses, the group has assembled a baseline comparison system database on the predecessor sys-

tem, the Space Shuttle. This work of identifying and acquiring the needed data and tools lays the foundation for a world-class RMS analysis and evaluation capability within the 2GRLV program for the next two design and development phases.

Planning is critical in any endeavor. The RMS Working Group has meticulously and expeditiously developed a detailed plan of specific RMS-related programmatic and analysis tasks required in the near term (12 months) and longer term (two to five years). (The chart on p. 17 displays the RMS Schedule.) These tasks were mapped to resource requirements and placed on a timeline. The task participants, task lead, and required tools were also displayed. Armed with this information, the group was able to provide the program manager for 2GRLV with a clear picture of RMS requirements.

### Team Interaction

The RMS Working Group has implemented the "team" concept well. All RMS efforts are done within an integrated team of experts representing all pertinent areas including RMS, safety, mission assurance, and technical risk management. Other experts are called in as required. The team has good visibility within the program office and does an excellent job of including the competing system contractors and engine subcontractors.

Given the dynamic nature of major programs, the RMS team has been implemented with flexibility in mind. In fact, the team recently decided that coordination and team activity must become more efficient in the future to allow more time for RMS task execution. The open communication and well-grounded relationships among team members will smooth the way for such changes.

One improvement would be to develop a more integrated link between the RMS engineers and the system engineers. There are still system engineers who doubt the need to consider RMS as equal with performance, schedule, and cost when making design trade-offs. Addi-



tional interaction is also needed between the RMS and cost teams. Given that at least 60 percent of the life cycle costs will be from support of the system during its service life, it appears inconceivable that life cycle costs can be estimated without the benefit of expertise and analytical results from the RMS community.

### **Concept Phase**

During the concept phase of any major system, data—the raw material for analysis—are necessary to reduce program risk. The RMS team has done a significant amount of data gathering. Since no solid 2GRLV system concept currently exists, most of these data come from the predecessor system, the Space Shuttle, and similar systems/subsystems that are analogous to anticipated 2GRLV concepts.

Much of the analogous subsystem data came from the Air Force. A significant amount of analysis has already been done to identify reliability and maintenance drivers on the existing Space Shuttle. The Program Office gathered lessons learned and conducted root-cause analysis to ensure the 2GRLV program does not repeat the mistakes of the past.

Unfortunately, data voids still exist. NASA chose not to buy the technical data package for the Space Shuttle, and no centralized database was ever developed for recording all the data pertinent to Space Shuttle operations and support. Although expensive, establishing a comprehensive logistics management information database for the 2GRLV program would, in my view, create an effective and permanent data repository for any type of RMS analysis throughout the life of the system.

The RMS team also did an excellent job specifying RMS-related data required from the contractor. For the 2GRLV program, these RMS data must be put on the contract in order to reduce program risk in the areas of life cycle cost and launch availability. The team also fully recognizes another important point. As with other engineering data, RMS engineering data must be available for re-

view during the design process because such data yield little value as a design tool when delivered at the end of contract. Feedback in the form of RMS data is needed during the design process in order for the RMS team to influence design and reduce program risk. Too often, program offices fail to obtain interim access to emerging RMS data.

Likewise, vendors often fail to give adequate attention to RMS during design, and rush to create the RMS data as an afterthought at the end of the contract. The program office must set requirements and metrics that impress upon vendors the importance of integrating RMS in the overall system engineering process from the beginning.

### **System Testing**

In addition to obtaining RMS design data in a timely manner, the acquisition of adequate RMS-related test data is also very important. The RMS data generated from engineering estimates will invariably have errors. The specific type and extent of these errors can be found either through actual test data or during the operational life of the system. Although system testing is expensive, discovery of problems during the system's service life is certainly more expensive in the long run. During engineering development, the RMS team will request a supportability demonstration and an adequate amount of test data to validate the achievement of system RMS requirements. RMS-related testing, however, customarily receives lower priority than other system test-data requirements. Since RMS will be a primary determinant of most of life cycle cost (a key parameter) for the 2GRLV, adequate RMS-related testing should be conducted. The cost of such testing can be minimized if RMS is integrated with other system testing whenever possible.

The RMS Working Group has shown innovation in the area of modeling and simulation. It has already developed fault trees for the Space Shuttle Main Engine of the baseline comparison system Space Shuttle. This subsystem is a major support cost driver for the Space Shuttle. A maintainability model is under devel-

opment that will assist in estimating vehicle turnaround time based on accessibility factors of the Space Shuttle and comparative Air Force subsystems.

Also, a partial Reliability Centered Maintenance model has been developed. An ongoing process of developing additional models is taking place, and extensive use of discrete event simulation is planned. The experience gained in modeling Space Shuttle RMS will be used to establish RMS goals, allocations, and predictions for the 2GRLV system concepts.

The RMS team should pursue further promotion of its work. Marketing of RMS accomplishments and the significance of its work must be done to ensure that program personnel and NASA executives are aware of the benefits of RMS among all the other program priorities and politics. Important for the RMS team to remember is that persistence is the key. The 2GRLV must meet its life cycle cost goals, and the only way it can do this is through optimized RMS. Even though the RMS community is often seen as a bearer of bad news with its "pay me now or pay me later" message, the system engineers must be shown the impact of their decisions on the life cycle cost of the system.

### **Cost Savings**

A major mandate of the 2GRLV program is to design a system which is much cheaper than the current Space Shuttle. The 2GRLV program has recently expressed concern over the viability of the system due to the lack of evidence in the contractor's concepts that cost is being adequately attacked.

Recent redirection within the program is an important step in saving the program from excessive life cycle cost. This new guidance, provided by the program manager, is a major thrust to consider the entire system—not merely the vehicle—when developing new concepts for replacing the Space Shuttle. The concept contractors and NASA engineers will look at the entire support system along with the vehicle. The program manager interprets the support system

RMS Schedule				FY 2003											
SLI RMS Role	Primary Participants	Team Lead	Resources	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Near Term: Analysis Tasks								MRR				SRR		SR	
1. Develop baseline failure data: LOX/RP engines												Start		Co	
2. Modify near-term RMS tools/models for SRR	TD	TD53	1 FTE												
3. Apply RMS tools/models at SRR	ED	UP10	4FTE+\$100K												
4. Develop systems availability concept for DoD	Ops/TD/ED	UP10	4FTE												
5. Support concept of operations development	Ops/TD/ED	Ops	5FTE												
Long Term: Analysis Tasks															
1. Develop models for in-house analyses	SMA/Ops/TD/ED	UP10	6FTE												
2. Execution of in-house RMS Analyses															
Reliability using FIRST/SAFE	SMA	S&MA	6FTE												
Supportability using Extend/CAME	ED/TD/Ops	ED42	5FTE												
Maintainability using RL4/Relex	ED/ED/Ops	SMA	6FTE												
Manufacturability (tools TBD)	ED/ED/Ops	TD53	2FTE												

in a broad sense to include, but not limited to, facilities, training, support equipment, parts management, mission planning, and support of this entire support system. The process of obtaining major cost savings requires advances in many support and technology areas as well as keeping the system design simple and robust, even if it adds weight to the vehicle.

Although the integrated RMS engineering and analysis approach will maximize the probability of achieving the 2GRLV life cycle cost and launch availability goals, some major cost drivers exist for which significant improvements must be realized to make the 2GRLV successful.

### Sustainment of Thermal Protection System

Sustainment of Thermal Protection System (TPS) on the Space Shuttle is very labor-intensive, and the materials are too expensive. In addition, an excessive

amount of infrastructure is dedicated to TPS maintenance and fabrication. A more durable and longer life TPS material is required. The TPS components must be standardized and made interchangeable, and extensive automated diagnostics and prognostics capabilities are needed.

### Development of Maintenance Concept

Significant life cycle support costs can be realized if a maintenance concept can be devised that does not require extensive disassembly and inspection of all the subsystems on the vehicle as is the case with the Space Shuttle. The current Integrated Vehicle Health Monitoring (IVHM) project is trying to achieve such a capability.

### Design to Existing Facilities

Another key to keeping costs down will be a design that takes maximum advantage of existing support facilities. Obtaining future funding for large-scale

construction projects similar to the existing Vehicle Assembly Building is unlikely.

### Sustainment and Readiness

The 2GRLV program must also ensure that there will not be a need for a large sustainment engineering force such as with the Space Shuttle. Absolutely necessary is that the 2GRLV program adopt a maintenance philosophy similar to that used by the military to keep its aircraft at high readiness; or even better, to emulate commercial airline operations. Unfortunately, this change may be fought on the political front rather than in the engineering community. Nonetheless, without a major change in maintenance philosophy, virtually certain is that the 2GRLV program will not meet its life cycle cost requirement.

### Autonomous Flight Operations

Although not an RMS issue, autonomous flight operations should also be aggressively pursued. However, de-

spite the availability of proven technology, this is another politically charged issue.

### Performance-based Logistics

DoD has recently focused attention on the concept of Performance-based Logistics (PBL). NASA has demonstrated a similar focus. As with the DoD PBL concept, the 2GRLV program manager has set out to minimize total life cycle cost while meeting system availability requirements. The program office has also made it clear that it intends to deliver a capability, not just a system. Performance will be based on both demonstrated technical capability and supportability for the life of the system. In so doing, the 2GRLV program office is certainly in step with the PBL tenet of designing a support system with equal rigor as the rest of the system itself.

Tying contract incentives to these objectives is also important. In addition, long-term product support providers and system integrators must be selected based on competition. Finally, implementing continuous improvement in system supportability and reduction in operating costs through dedicated investments in technology refreshment is important throughout the life of the 2GRLV system.

### “-ilities”

The 2GRLV system engineers are focusing on the goal of overall system effectiveness since system effectiveness goes beyond performance to include RMS and cost. The 2GRLV program office and the RMS team must consider other “-ilities” in its efforts to design and deliver the objective 2GRLV capability.

**Suitability** is the degree to which a system can be satisfactorily placed in use, with consideration given to availability, maintainability, safety, human factors, logistics supportability, and environmental impacts. Suitability is a measure of the overall utility of a system to the customer.

**Dependability** is the probability that a system available at the start of a mission will remain operable and capable of per-

forming its required function at any given time during a specified mission profile. Influencing factors include **reliability**, **maintainability**, and **supportability**.

**Usability** is the degree to which an operator can complete tasks effectively and efficiently. It is concerned with functionality, ease of learning, ease of use, and overall user satisfaction.

**Durability** is the ability of the system to resist wear, cracking, corrosion, deterioration, thermal degradation, etc., while continuing to function as designed, under specified conditions for a specified period.

### Supportability

One area, often neglected in programs, is computer resources support. Most programs do not have the staff or availability of support organizations to properly address this complicated area of supportability. Yet, given that any 2GRLV concept will include extensive application of computers and software, significant resources (and cost) will be required to sustain all the automated capabilities.

Computer resources support includes maintenance and sustainment of all computer hardware, firmware, and software on the 2GRLV vehicle as well as on all ground support equipment and other operations elements. During system design and development, it also includes test and evaluation hardware and software. Computer resources support

will require its own supportability plan. Support for computer hardware, firmware, and related media will include maintenance, supply support equipment, personnel, training, technical data, facilities, packaging, handling, storage, and transportability.

Software sustainment and upgrade will require the same level of detailed planning. Unfortunately, past experience shows that computer resources support is the area that receives the least amount of government insight. As a consequence, guidance to the contractor can be inadequate, often resulting in large cost overruns, schedule slippages, and reactive workarounds. Actions must be taken early in the program to avoid such problems with computer resources.

### Supportability Exchange Program

The experience of working with the NASA 2GRLV program office convinced me of the need for an exchange program between the supportability engineering components of the Army at Redstone Arsenal and the RMS team at the NASA MSFC. Such an exchange program would promote interagency cross-fertilization of concepts, techniques, and lessons learned. It would also stimulate creativity and synergy, and ultimately advance RMS modeling and simulation capabilities.

Editor's Note: The author welcomes questions or comments on this article. Contact McPherson at [Gary.McPherson@PeoAvn.Redstone.Army.Mil](mailto:Gary.McPherson@PeoAvn.Redstone.Army.Mil).

## Defense Acquisition Management Framework Chart No Longer Available

**T**he Defense Acquisition University will no longer stock nor update the old Defense Acquisition Management Framework Chart. A replacement chart reflecting the new 5000-series changes is currently under design and will be issued once the 5000 documents are revised. As a historical reference only, the obsolete chart can still be found at [http://www.dau.mil/pubs/chart3000/ch\\_3000.asp](http://www.dau.mil/pubs/chart3000/ch_3000.asp).





# A T T E N T I O N

MARK YOUR CALENDARS NOW FOR THE  
DEFENSE ACQUISITION UNIVERSITY ALUMNI ASSOCIATION

## **20<sup>TH</sup> ANNUAL ACQUISITION SYMPOSIUM**

JUNE 17-18, 2003  
DEFENSE ACQUISITION  
UNIVERSITY  
SCOTT HALL, FORT BELVOIR, VA.

**DELIVERING TODAY'S AND  
TOMORROW'S WARFIGHTING  
CAPABILITIES  
THROUGH EVOLUTIONARY  
ACQUISITION**



Join senior Defense leaders and acquisition professionals to discuss some of the most timely and pervasive topics in defense policy.

Gain up to 12 Continuous Learning Points and have your questions answered by senior acquisition leaders through a series of keynote presentations, panels, and workshops designed to explore all as-

pects of Evolutionary Acquisition and what it means for you.

For more information on topics, speakers, and registration, visit the DAUAA Web Page at [www.dauaa.org](http://www.dauaa.org). If you don't have Internet access, contact the Association by telephone at 703-960-6802/1-800-755-8805, or by fax at 703-960-6807.

### **LIKE TO GOLF?**

If you do, don't forget to check out the pre-symposium golf tournament on Monday, June 16, 2003, at the Fort Belvoir Golf Course.

# DAU Collaborates with Local Organizations to Create Two New Continuous Learning Modules

## Javits-Wagner-O'Day (JWOD) Program • Cost as an Independent Variable (CAIV)

KELLY NIEVES

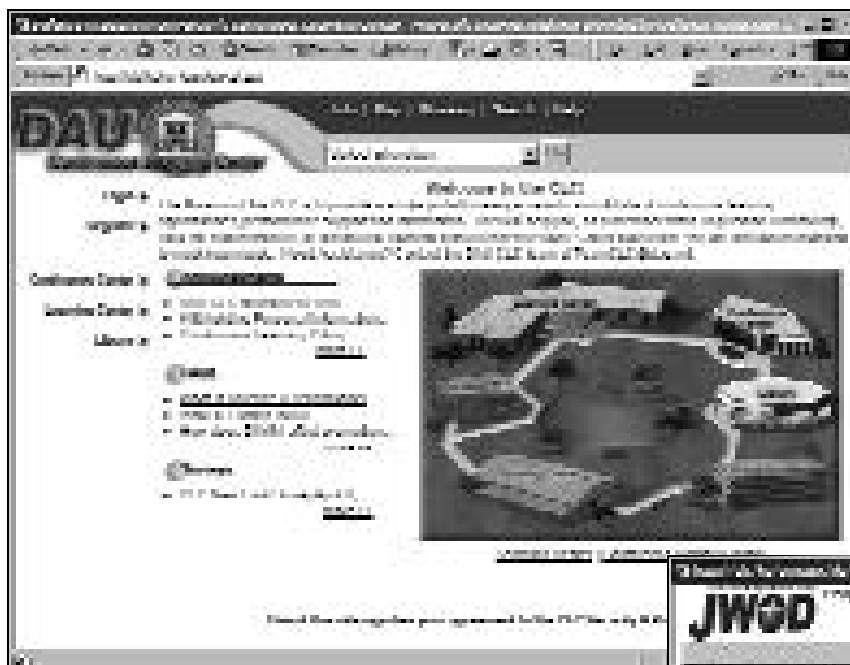
Over the past decade, the Defense Acquisition University (DAU) at Fort Belvoir, Va., has worked diligently to develop ways of harnessing the power of the World Wide Web and deliver interactive course material online to the Acquisition, Technology and Logistics (AT&L) workforce. Recently, DAU completed development of online Continuous Learning (CL) modules on the Javits-Wagner-O'Day (JWOD) Program and Cost as an Independent Variable (CAIV).

The AT&L workforce can now access information on JWOD and CAIV whenever and wherever they wish by logging onto the DAU Continuous Learning Center (CLC). This article will describe how DAU collaborated with a local business and universities to develop these JWOD and CAIV online modules.

### DAU Continuous Learning Center

In 2001, DAU recognized that the AT&L workforce needed "just in time" access to current information on policies, procedures, and programs that impact their ability to perform their jobs. In response

*Nieves is a Program Manager, Distributed Learning Team, Advanced Technology Solutions, Inc. (ATSI)/DAU Center for e-Learning. Contributing authors are Michael Barclay, a training specialist in the Javits-Wagner-O'Day (JWOD) Program Office; Bob Faulk, Director, Continuous Learning Center/DAU Center for e-Learning, Curricula Development and Support Center (CDSC); Luis Ramirez, Director, Virtual Learning Center, DAU Center for e-Learning; and Sharon Richardson, Director, DAU Center for Business.*

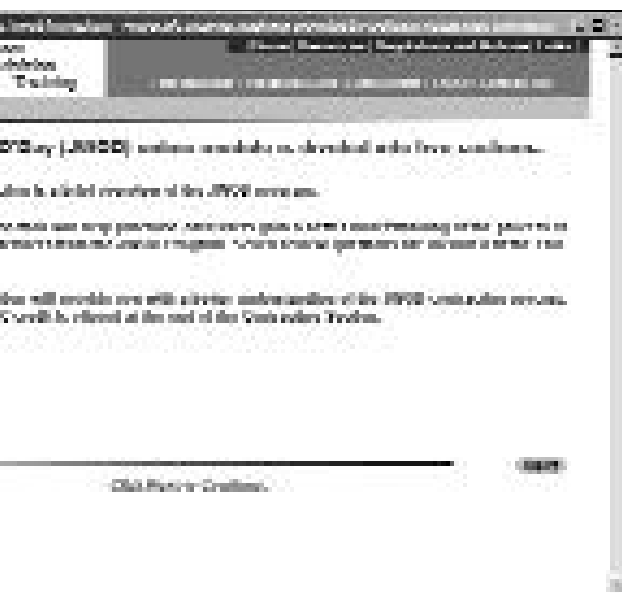


to that need, DAU created an online CLC at <http://clc.dau.mil>.

DAU Professor Bob Faulk currently serves as director of the CLC. Since it was formally launched in July 2001, this Web site has provided access to modules that members of the workforce can access wherever and whenever they need specific information on a wide range of topics. To date, the CLC Web site hosts 35 modules. The site also has other capabilities that allow the workforce to collaborate on projects with others who are not physically located at their customary work sites. DAU will continue to leverage the power of this Web site to serve the emerging training and educational needs of the AT&L workforce.

### **DAU Graduate Internship Program**

In 2001, it became increasingly evident that it would be necessary for DAU to find creative new ways to supplement its limited resources to produce new CL modules in a cost-effective manner. DAU also wished to create mutually beneficial partnerships with local organizations.



To meet these e-Learning and organizational goals, DAU created a graduate internship program. The goal would be

to establish relationships with local universities offering graduate programs in education (specifically, in the areas of e-Learning and online instructional technology), with the purpose of designing and developing new online modules in response to the professional development needs of the AT&L workforce.

Graduate students participating in this internship work with DAU faculty, who serve as Subject Matter Experts (SMEs) for the project. The SMEs ensure that the content for the module is complete, current, and accurate. They also work with a mentor at DAU, Dr. Kelly Nieves, who currently serves as Program Manager of the Distributed Learning (DL) Team, through a contract with Advanced Technology Solutions, Inc. (ATSI). She and the DL Team provide support services for DAU's Center for e-Learning. Nieves works with the graduate interns to ensure that the online module is instructionally sound and meets DAU's technical standards.

Each graduate intern's semester project is to work on a project to design and develop an online CL module. The local universities have the opportunity to partner with local organizations to ensure that their graduate programs of study are truly preparing their students with the skills required to succeed in their chosen fields. Graduate students benefit from the opportunity to work on the analysis, design, development, and production of e-Learning projects by putting into practice what they are learning through their program of study. Thus, the graduate internship program is designed to provide a "win-win" situation for all participants.

Graduate students selected to participate can choose to perform various tasks during their internship.

Graduate interns can choose to work on a specific portion of a CL module project. This work can include:

The Analysis and Design phases of the project. Under this option, graduate interns are responsible to deliver a management plan detailing an analysis of the target audience and learning objectives of the module. They also turn in an outline of the lessons to be included

**Final versions of both the JWOD and CAIV modules were completed and uploaded onto the DAU Continuous Learning Center Web site in November 2002. Members of the AT&L workforce can now access these online modules whenever and wherever they wish by logging onto the site at <http://clc.dau.mil>.**

in the module and a prototype lesson for the online CL module. The finished design will, in all respects, be ready for development and programming. Upon



## DISABLED USER ACCESSIBILITY

**T**hroughout the design, development, and evaluation of the on-line JWOD and CAIV modules, both teams paid particular attention to issues impacting how disabled users access these sites. The teams were focused on this area for two important reasons.

- Because DAU is a federal agency, all online material that it develops, procures, and maintains must be fully accessible to disabled users.
- The JWOD and CAIV teams were trained to comply with these requirements as established by Section 508, a 1998 amendment to the Rehabilitation Act of 1973 so that all individuals—both disabled and non-disabled—will have equal opportunities to access information from the online JWOD module.

Accessibility issues were particularly important in the case of this particular project, since JWOD's mission is to support the educational and employment needs of the blind.

acceptance, DAU proposes that 3 credits be granted for the semester. This course may be a project, seminar, or internship format.

**The Development and Implementation phases** of the project. Under this option, graduate interns develop scripts, graphics, storyboards, and tools (e.g., site map and Frequently Asked Questions) for the entire CL module in HTML/Java Script, adhering to DAU's technical standards for online material. The graduate intern will also be responsible to work with DAU faculty and Center for e-Learning staff to make arrangements to have the newly completed CL module uploaded onto the CLC Web site.

Graduate interns can also choose to complete work on all phases of a CL module project. In this case, they are re-

sponsible for all deliverables associated with the Analysis, Design, Development, and Implementation phases of the projects as described previously.

In the past year, DAU has worked with faculty and students from the graduate schools of education of two universities in the Washington, D.C. area: George Mason University (<http://www.it.gse.gmu.edu/>) and Towson University (<http://wwwnew.towson.edu/coe/departments/istcprgram>). These partnerships have proven successful in the design and development of engaging and informative online CL modules.

### Javits-Wagner-O'Day (JWOD) Program

In 2002, DAU began working with the JWOD Program Office. Located in Arlington, Va., the JWOD Program is a public-private partnership administered by the Committee for Purchase From People Who Are Blind or Severely Disabled. An independent federal agency composed of 15 members—all appointed by the President—the Committee has designated two national nonprofit organizations to assist in the operation of the JWOD Program: National Industries for the Blind (NIB) and National Industries for the Severely Handicapped (NISH), serving people with a wide range of disabilities.

Over 14 million Americans live with severe disabilities, and the unemployment rate for that segment of the population is 70 percent. The JWOD Program helps people with disabilities who are unable to obtain or maintain employment on their own.

Michael Barclay, a contributing author for this article and training specialist at JWOD, spent six months assigned to the DAU Virtual Learning Center and worked closely with the faculty and staff on the JWOD module. Though his primary objective was to support DAU's efforts to encourage acquisition professionals to support the JWOD program, he also had time to engage and support other DL efforts. Barclay's work at DAU directly supported JWOD's mission to educate federal customers about their

requirement to purchase products and services made available by nonprofit agencies across the country employing such individuals.

### JWOD Module

To expedite dissemination of information on the JWOD program to acquisition professionals throughout the AT&L workforce, Barclay and the Center for e-Learning staff leveraged DAU's CLC Web site. To begin, they set a goal of creating an online JWOD module by August 2002. Given the demanding schedule and lack of available resources, they requested the assistance of a graduate intern for this project.

During the spring 2002 semester, Barclay and Nieves analyzed learning needs, target audience, and overall objectives for the module. By June 2002, they had designed the structure of the module and identified learning strategies. They also began designing the HTML template to be used in the prototype lesson of the module.

During the summer 2002 semester, a graduate intern was identified to work on the JWOD project. Sean Young of Towson University spent July and August working with the JWOD team at DAU. They redesigned the layout and navigation of the template for the module to make it more interactive and user-friendly. Pages of content scripts were turned into storyboards that were evaluated by both DAU and JWOD staff. Graphics were carefully selected to support and enhance the learning experience of the end-user.

The JWOD team also worked together to determine the final design considerations for the layout of the lessons for the module. It was decided that the module would be divided into five lessons:

- **Introduction**—A brief overview of the JWOD program.
- **Purchase Card**—Information that will help purchase card users gain a better understanding of the process of buying products and services from the JWOD program.

- **Contracting**—Information that will provide acquisition professionals with a better understanding of the JWOD contracting process.
- **FAQs**—Frequently Asked Questions.
- **Contact Us**—Contact information for JWOD and technical assistance.

## CAIV Module

In spring 2002, DAU also identified the need to create an online CL module on Cost as an Independent Variable (CAIV). Sharon Richardson, Director of the Center for Business at DAU's Curricula Development Support Center (CDSC), realized that the most current information on CAIV was located in various sources; many of the AT&L workforce who needed CAIV resources did not know where to go to get the most current and comprehensive information on DoD 5000 regulations regarding CAIV.

Richardson also realized that AT&L workforce members across the United States needed access to the most current application-based learning. She recommended that DAU design and develop an online CL module on CAIV that could be hosted on DAU's CLC Web site.

Richardson agreed to serve as Subject Matter Expert (SME) on the project. DAU suggested that she work with Nieves in identifying a graduate student to develop this module through the graduate intern program. Lisa Knudson of George Mason University set the ambitious goal that she would complete all tasks related to the design and development of the CAIV module over two months in summer 2002. Essentially, Knudson agreed to do a six-credit internship, which entailed full-time work over July and August 2002 to complete her assignment.

Readily apparent to the CAIV team was the extensive amount of work required to complete the project during summer 2002. Accordingly, the team's first priority was to create a project schedule. Next, they spent the rest of July doing the analysis and design tasks. Richardson and Knudson worked closely together to identify learning ob-

jectives, target audience description, and a layout of the lessons for the module. They also designed the template and prototype lesson for the online module, identifying graphics and images that they wished to include in the lessons as well.

The CAIV team also worked together to determine the final design considerations for layout of the module's five lessons:

- **Objectives**—Objectives of the Module and Instructions on how to use the site; history of CAIV and why it's used.
- **Background**—The evolution and history of CAIV and some basic definitions.
- **Life Cycle**—The Life Cycle Cost description and model.
- **Essentials**—The stakeholders, process, Risk Management, and CAIV tools.
- **Assessment**—Three CAIV Scenarios to evaluate what users have learned.

A major portion of July 2002 was also spent working on preliminary tasks associated with the development of the module. The CAIV team knew that they would have to locate current information on CAIV from a variety of sources. Once they found that data, they had to assimilate it all into a concise text that would present the information to DAU learners in organized and comprehensible lessons.

Given the availability of a vast amount of complex information on CAIV, they knew that writing the text for the module would be challenging. Toward that end, they spent many hours going through material and organizing it into lessons. After the text was developed into basic storyboards—which Richardson and Nieves reviewed and edited—at this point, they were ready to create programmed lessons.

## Programming the JWOD and CAIV Modules

The most laborious portion of the development phase of the JWOD and CAIV projects was the development of the programmed lessons in HTML/Java

Script. The long hours and hard work, however, ultimately paid off as the teams began to observe the modules progress from concept to production.

Matt Iannitto, a computer programmer working for ATSI as an undergraduate intern, also joined the module teams. Through Iannitto's efforts, navigation links were programmed to help learners quickly access the information they needed. He also programmed Next and

**Graduate students benefit from the opportunity to work on the analysis, design, development, and production of e-Learning projects...thus, the graduate internship program is designed to provide a “win-win” situation for all participants.**

Back buttons as well as external links to useful Web sites. Graphics, pictures, and other images were chosen and, at times, developed originally by the JWOD team and DAU staff.

To help users find their way around the modules, three color-coded navigation

bars were developed. A blue navigation bar at the top displays active links to the start of each lesson in the module. A yellow navigation bar at the top displays active links to the start of each topic within the lessons. Links from a red navigation bar at the top of the screen direct users to other supporting online material for the modules, with information such as Assessment Items, Resources, Links, as well as Regulations and Policies.

The CAIV team also developed additional supporting online material for their module (also accessed via active links from the red navigation bar at the top of the screen). Such material included a site map and Frequently Asked Questions. Like the JWOD team, they also spent many hours carefully choosing graphics and images to enhance the learning experience of the end-user.

By the middle of August, a draft of the programmed lessons for all lessons and supplemental material for the JWOD and CAIV modules was complete. Barclay and the JWOD staff carefully reviewed the content in all of the programmed lessons. Richardson and other faculty from the Capital and Northeast Region campus at Fort Belvoir reviewed the CAIV module. Nieves also reviewed the draft of both modules from an instructional and technical point of view. Faulk also closely monitored the progress of both projects.

By the end of August 2002, all reviewers for alpha versions of the JWOD and CAIV modules were satisfied that the modules were educationally sound and met all of the learning objectives that the developers had set out to accomplish.

The JWOD and CAIV teams also requested additional reviewers look at the beta versions of the modules and provide feedback to ensure that the modules would meet the learning needs of the AT&L workforce. The beta tests were conducted in September 2002.

Since both graduate interns had completed more than the required hours for

their projects and actually had returned to their teaching jobs and new graduate courses, they were not available for more work on the modules. Therefore, Nieves and the ATSI staff worked with Barclay and Richardson to complete the final editing and revisions required on the modules during September and October 2002.

Final versions of both the JWOD and CAIV modules were completed and uploaded onto the DAU CLC in November 2002. Members of the AT&L workforce can now access these online modules whenever and wherever they wish by logging onto the DAU CLC.

### **A Unique Collaboration**

DAU fully understands that creating engaging and effective online instructional material requires bringing together individuals with an array of perspectives and talents. Once the Center for e-Learning at DAU decided to create online modules for the JWOD Program and CAIV, it leveraged the skills and expertise of its faculty and contractor support staff. The Center also established and fostered relationships with a business and two universities in the local Washington, D.C. area. These partnerships resulted in a unique collaboration of strong teams who worked together to accomplish development of the JWOD and CAIV modules on time, while making maximum use of all available resources.

Because of their collaborative efforts, acquisition professionals and individuals with disabilities now have access to complete information on the products and services offered by JWOD, as well as information on JWOD's dedicated work in support of individuals with disabilities. One-stop shopping is also now a reality for those in the AT&L workforce who need resources with the most current and comprehensive information on CAIV.

Editor's Note: See p. 61 for information on DAU's newest module, Reducing Total Ownership Costs. To learn more about the DAU Continuous Learning Center, visit the CLC Web site at <http://clc.dau.mil>.

## **IN MEMORIAM**

*Joseph A. "Joe" Drelicharz*



**T**he Defense Acquisition University has received word of the death of Joseph A. "Joe" Drelicharz on Dec. 18, 2002, due to an apparent heart attack.

Joe joined the Defense Systems Management College (DSMC) in November 1982 as a Professor of Engineering Management, School of Program Management Division, at Fort Belvoir, Va. Prior to joining DSMC, Joe worked for 15 years as a senior staff member of the Plans and Analysis Office, Technical Director, Naval Civil Engineering Laboratory, Port Hueneme, Calif.

In January 1999, Joe retired from federal civilian service and entered private industry. At the time of his death, he was employed by Cherokee Systems, in Crystal City, Va.

Joe was a graduate of DSMC's Program Management Course (PMC 87-1). He is survived by his wife, Carol, of Springfield, Va.



# **2003** **ANNUAL PROGRAMS REVIEW**

The Precision Strike Community's  
best forum on Programs supporting  
Precision Engagement will be held  
29-30 April 2003

## **Transformational Roadmaps: The Future of Precision Engagement**

Scott Hall, Howell Auditorium  
DEFENSE ACQUISITION UNIVERSITY  
FORT BELVOIR, VIRGINIA

### **KEYNOTE ADDRESS**

Lt. Gen. James E. Cartwright, USMC—  
(J-8) The Joint Staff

### **Other Confirmed Participants**

Lt. Gen. Michael A. Hough, USMC—  
Deputy Commandant for Aviation, HQ USMC  
Harry Schulte—Senior Acquisition Executive, USSOCOM  
PEO Panel—Service Weapons PEOs  
Test & Evaluation Panel—Key Members of  
DoD Test Community  
Military Department Briefings on Precision  
Engagement Systems

**Knowledge,  
Networking,  
and Access to  
Key Decision  
Makers**



**For Information and to Register: [www.precisionstrike.org](http://www.precisionstrike.org)**

# Fourth International Acquisition/Procurement Seminar—Pacific (IAPS-P)

## Concepts for Developing Defense Industry

CHRISTINA CAVOLI

**T**he Fourth International Acquisition/Procurement Seminar—Pacific (IAPS-P), was originally scheduled for September 2001. Regrouping after the events of 9/11, the fourth seminar was held Sept. 23-26, 2002, at the Defense Acquisition University/Defense Systems Management College (DAU/DSMC), Fort Belvoir, Va. The 2002 seminar focused on cooperative programs and international acquisition practices and training.

### “Concepts for Developing Defense Industry”

Sponsoring this year’s event were DAU/DSMC, the Australian Defence Force Academy (ADFA), the Korea Institute for Defense Analyses (KIDA), the Korea Association of Defense Industry Studies (KADIS), and the Singapore Ministry of Defense (MINDEF).

Participation was by invitation only, and extended to Defense Department/Ministry and defense industry employees from the sponsoring nations who are actively engaged in international defense acquisition programs. For the first time, Japan participated and provided a national presentation delivered by a representative of the Japan Defense Agency.

The theme for the 2002 conference was “Concepts for Developing Defense Industry” with a concentration on global suppliers, offsets, commercial technology, assurance of supply, and residual capability. Presentations included “The

*Cavoli is a freelance writer for Program Manager Magazine. She also publishes OSD’s online newsletter, AI Today.*



National Presentations were a highlight of the Fourth International Acquisition/Procurement Seminar—Pacific (IAPS-P), held at Fort Belvoir, Va., Nov. 23-26, 2002. From left: National Presenter Army Colonel Won Mo Jung, Director of Acquisition Policy Division, Republic of Korea, Ministry of Defense (ROK MND); Seminar Director Richard Kwatnoski, International Department, DAU/DSMC; National Presenter Wendy Steele, Defence Materiel Attaché from the Embassy of Australia in Washington; National Presenter Hiroshi Waguri, Deputy Director, Equipment Coordination Division, Bureau of Finance and Equipment, Japan Defense Agency (JDA); National Presenter Alfred Volkman, Director, International Cooperation, USD(AT&L); and National Presenter Quek Pin Hou, Director of Defense Procurement, Singapore.

Future Security Environment in the Pacific,” “Trans-Pacific Cooperation,” “Acquisition Training,” and “Promoting/Restricting Arms Exports.”

### Keynote Address

The keynote speech was to be delivered by E.C. “Pete” Aldridge Jr., Under Secretary of Defense for Acquisition, Technology and Logistics (USD[AT&L]). Due to a last-minute scheduling conflict, Aldridge was unable to attend. Aldridge’s speech, delivered in absentia by Alfred Volkman, Director, International Cooperation, USD(AT&L), centered on the

acquisition challenges facing all countries—the globalization of industry and technology, the demands of 21<sup>st</sup> Century warfare, and defense industry consolidation.

Volkman stressed the increasing importance of emerging technology, classifying the war against terrorism as “techno-centric,” meaning technology is mandatory in finding and exploiting the weaknesses of terrorists. “The war on terror is most assuredly a coalition effort,” he said, “and collective efforts have already led to a safer world.”

To continue the effort, Volkman emphasized the need to share access to high technology among nations in the coalition to reduce costs and lay the groundwork for interoperability.

The Joint Strike Fighter was cited as a successful example of international cooperation from a systems development level. The project involved research and development money from several countries and resulted in the finest strike fighter in the world at a fraction of the cost for each country involved. This type of multilateral cooperation was called "a blueprint for missile defense development cooperation."



Wendy Steele, Defence Materiel Attaché, Embassy of Australia in Washington. "You can play policy until the cows come home," said Steele, "but implementation is the key."

Volkman also stressed the importance of "in-kind" commitments in addition to monetary cooperation in the form of training, testing facilities, radar sites, etc.

Observing that rapid deployment was a must for 21<sup>st</sup> Century warfare, Volkman noted the existing interoperability gap between the United States and coalition countries, and insisted that now is the time to unify efforts to create lighter, faster, interoperable systems. He went on to say that 21<sup>st</sup> Century warfare won't be fought in countries with large standing armies; that there is now a mandate to create light, fast, flexible defense. "No one can do it alone," he said. "A coalition is necessary for logistics."

## DAU Welcome

DAU President Frank J. Anderson Jr., welcomed those assembled, noting that he looked forward to hearing the na-

tional presentations. He talked about how the University is participating in the fundamental transformation of the Department of Defense. "Our transformation has already begun," said Anderson, "by taking steps to become more agile, quicker to respond to the customer, and increasing the University's outreach programs by using high-tech tools like distance learning."

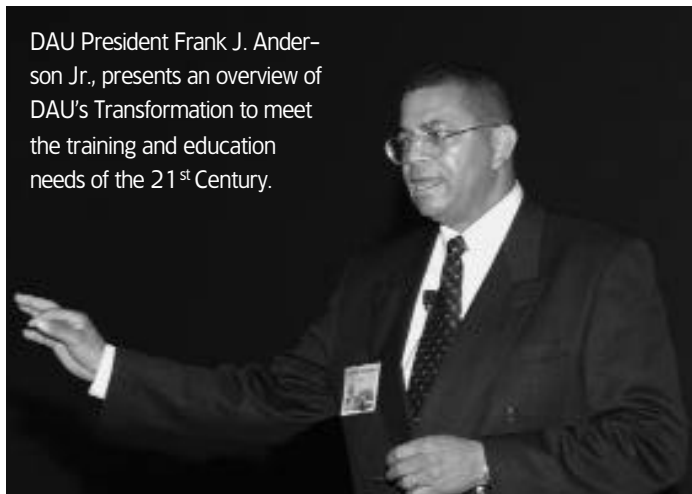
The skill sets required by the new business environment of the 21<sup>st</sup> Century, he said, "can no longer be served by the traditional training methods of the 20<sup>th</sup> Century."

DAU, Anderson noted, is looking to the future and has re-engineered the University organizational structure to increase emphasis on speed and accuracy of course development; collocated DAU teaching facilities where the DoD AT&L workforce is concentrated; provided job-specific performance support; and deployed e-Learning initiatives.

"We have rapidly incorporated modernization initiatives," he said, "to add

Army Colonel Won Mo Jung, Director of Acquisition Policy Division, Republic of Korea, Ministry of Defense. Of particular concern to the ROK MND, he told the delegates, is the increased need for high-technology systems, creating escalating costs at a time of decreasing budgets.

DAU President Frank J. Anderson Jr., presents an overview of DAU's Transformation to meet the training and education needs of the 21<sup>st</sup> Century.



value to our learning products for our customers."

## National Presentations

On the first day of the seminar, policy-level presentations were given by representatives from each of the sponsoring countries and Japan concerning their respective national policies on international acquisition/procurement. A panel discussion with the presenters ended the day, including a question-and-answer session.

Taken as a whole, the presentations reveal a group of countries with militaries that differ greatly in size, budget, mission, and strengths, yet all share many overriding concerns: interoperability, technological advancement, commercialization, budget constraints. Additionally, emerging from the presentations was a newly focused concentration







Donna Richbourg, former Principal Deputy Director, Defense Procurement and Acquisition Policy, OUSD(AT&L).

on uniting efforts to combat the war against terrorism.

### **Australia Department of Defence National Presentation**

The national presentations began with "Conclusions for Developing an International Defence Industry" by Wendy Steele, Defence Materiel Attaché from the Embassy of Australia in Washington. Steele focused on the importance of implementing industrial partnerships to ensure defence capabilities and readiness. "You can play policy until the cows come home," she said, "but implementation is the key."

Since a significant reform effort in the 1990s, the Australian Department of Defence has implemented a strategic approach to developing industry relationships, including relocating closer to the support teams and industry, and performing sector studies. In order to adhere to a policy that dictates its Department of Defence remain largely self-reliant, Australia has increased reliance on local industry, linking procurement needs and long-term demand to industry sustainable outcomes by ensuring industry retains key production capabilities and critical skill sets, regardless of the current economic trend.

"A project-by-project approach doesn't work," stated Steele. "A strategic approach is needed in setting industrial policy."

### **Republic of Korea, Ministry of Defense National Presentation**

Army Colonel Won Mo Jung, Director of Acquisition Policy Division, Republic of Korea, Ministry of Defense (ROK MND), delivered a talk on "ROK Weapons Acquisition Policy." Of particular concern to the ROK MND is the increased need for high-technology systems, creating escalating costs at a time of decreasing budgets.

To address the problem, the MND has focused on 78 areas of critical technology, and increased their Research and Development (R&D) allotment from 4.5 percent of the defense budget to 10 percent. By prioritizing an R&D capability, the MND hopes to improve domestic production of technology. When local procurement is not feasible, adopting principles of open competition and ensuring that the acquisition process is transparent and fair are also strategies currently being employed to capture more efficient and economical results.

### **Singapore Ministry of Defense National Presentation**

The Singapore representative, Director of Defense Procurement Quek Pin Hou, presented "Defense Procurement in Singapore: Value Creation and Enhancement." Based on its geo-political situation and the country's stable economy, the small Southeast Asian country—"somewhat smaller at high tide," said Quek—has focused on developing and nurturing their defense capabilities. Technology, he emphasized, is viewed as the force multiplier to compensate for Singapore's size and space limitations. "While technology advances us to a leading edge," stated Quek, "procurement advances give us a competitive edge."

The Ministry of Defense (MINDEF) has combined technology with business initiatives to create new procurement methods such as the online reverse auction, introduced in January of 2001. Using this system, the government buys from suppliers with the lowest bid in a live, online auction (in contrast with a traditional, formal auction starting with the highest bid).

Up to 12 percent in savings have been realized through this method. Other examples include online e-catalogs and the enterprise e-procurement systems to facilitate Web-based online sourcing.

### **United States Department of Defense National Presentation**

Volkman also delivered the U.S. National Presentation, entitled "Armaments Cooperation in the Asia-Pacific Region: The U.S. Perspective." Starting with the most elemental question—why the U.S. wants cooperation in this region—Volkman stressed the operational, economic, and technical reasons, including interoperability, reduced research and development costs, and access to the best technology that each country has to offer. Additionally, Volkman added political reasons: strengthening allied relationships and sustaining the ability and willingness to act together when threatened.

Interoperability was presented as a major concern and necessitated information sharing with allies. Volkman recognized that a cultural change is needed to facilitate doing business in a new way, to shift the mentality from business-as-usual to international cooperation. He also warned that armaments cooperation

Hiroshi Waguri, Deputy Director, Equipment Coordination Division, Bureau of Finance and Equipment, Japan Defense Agency (JDA). The nature of current events, according to Waguri, is changing [Japan's] defense orientation from peacekeeping and prevention of conflicts, to a proactive dispersal of forces to support the United States and allies in the war against terrorism.



tion is necessary to ensure European and other allies are not marginalized.

Citing Kosovo as an example, Volkman outlined how the superiority of the U.S. capabilities in that situation resulted in U.S. forces undertaking almost all of the difficult missions; and when working with allies being forced into the uncomfortable position of having to reduce capabilities to the lowest common denominator. The United States, he cautioned, can't be in alliances if the capability gap is too huge.

### Japan Defense Agency National Presentation

The final national presentation was delivered by Hiroshi Waguri, Deputy Director, Equipment Coordination Division, Bureau of Finance and Equipment, Japan Defense Agency (JDA). Presenting "Outline of the Organization, Policy and Acquisition of the Japanese Defense Agency," Waguri began with the ways in which the JDA is a remarkably different organization than the defense establishments of the other presenting countries.

By its own constitution, Japan cannot seek to be a military power, and therefore operates an exclusively defense-oriented policy with the desire to develop a moderate defense capability. Yet, the nature of current events is changing their defense orientation from peacekeeping and prevention of conflicts, to a proactive dispersal of forces to support the United States and allies in the war against terrorism.

Japan has an active pledge to support the United States in anti-terrorism efforts. As the nature of the JDA changes, Waguri predicted a change in the procurement process would be necessary as well, stating that the current acquisition system precluded planning for future needs and evolving circumstances.

### Other Conference Events

Industry presentations were given on the second day, featuring representatives from Lockheed-Martin, the Boeing Company, and Northrop Grumman. A Government/Industry Panel followed the

presentations. Presentations on the following day covered a variety of technical topics, from Advanced Concept Technology Demonstrations to the Small Smart Bomb Flight Test, the Foreign Comparative Test, the Collins Submarine, and the Australian 737 AEW&C [Airborne Early Warning and Control] Wedgetail.

The final day of the seminar began with a DAU presentation on acquisition and program manager training. A significant message to DAU's international customers was the process of how to access DAU's distance learning and continuous learning courses.

### Continuous Learning Center

Professor Bob Faulk currently serves as Director of the DAU Continuous Learning Center (CLC). Since it was formally launched in July 2001, this Web site at <http://clc.dau.mil> has provided access to modules that can be accessed wherever and whenever customers need specific information on a wide range of topics.

To date, the CLC Web site hosts 35 modules. The site also has other capabilities that allow the workforce to collaborate on projects with others who are not physically located at their customary work sites. DAU will continue to leverage the power of this Web site to

serve the emerging training and educational needs of the AT&L workforce.

### Virtual Campus

In addition, DAU also hosts a **Virtual Campus Web site** at <https://dau1.fed-world.gov/dau/index.htm> where Defense Acquisition University/DAU 2003 Catalog information and educational materials are readily available. Also offered at this Web site are many online classes servicing the entire acquisition community.

### Future Events

The International Acquisition/Procurement Seminars give defense procurement professionals an opportunity to actively engage with their counterparts in foreign countries, exchange best practices, and work on areas for possible future collaboration. The Atlantic version of the conference held its 14<sup>th</sup> seminar last year in Paris, France, with participation from France, Germany, Spain, the United Kingdom, and the United States, among others. The Pacific conference is a newer event, now in its fourth year, and is tentatively scheduling a fifth seminar to take place in Australia in 2003.

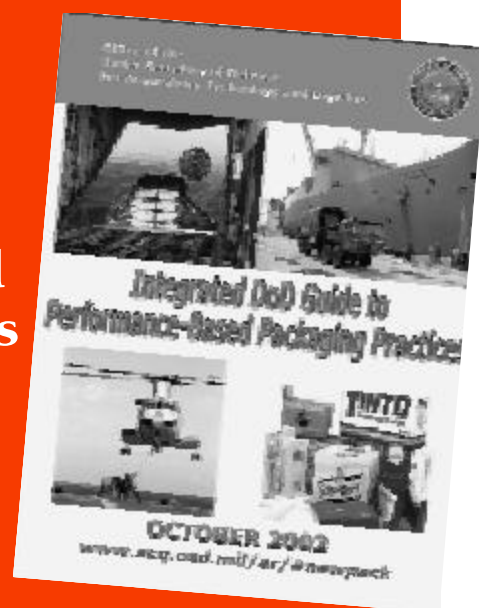
Editor's Note: For more information on annual international seminars, visit <http://www.dsmc.dsm.mil/international/international.htm>.

*Check Out*

## Integrated DoD Guide to Performance-Based Packaging Practices

*at*

*[www.acq.osd.mil/ar/#newpack](http://www.acq.osd.mil/ar/#newpack)*



**I**n the September-October 2002 issue of *Program Manager*, Rear Admiral (Ret) Freeman responded to articles that appeared in the May-June 2002 issue. It is somewhat difficult to tell whether he was responding only to my article ["Evolutionary Acquisition," p. 6, May-June 2002 *Program Manager*], or to several, but as I was the only author named, I guess it falls upon me to respond.

Please note that this is not a knee-jerk reaction to criticism, I happen to understand and, to some degree, agree with the comments made by Admiral Freeman. He is certainly correct, that 7 of the 8 roadblocks have been around since the '70s. That being the case doesn't change the fact that these remain roadblocks for evolutionary acquisition strategies. In fact, these 7 are roadblocks for almost all types of acquisition strategies.

Admiral Freeman addresses my problem with changing requirements, but may not have fully understood my point. He states, "[W]e still have not learned how to write specifications for a product that remains fixed during the life of a procurement." He is correct that products cannot stand still during the life of a procurement, particularly if the service life of these products lasts 10 years and longer. But that wasn't the focus of my consequence No. 5.

The problem is requirements creep during the development of these products. Again, if acquisition cycles run 7 to 10 years, the problem is obvious; but, if we can shorten these cycles to 1 to 4 years, changing requirements in mid-stream will only push us back to what we had before. The changes

***"Lately, in my opinion, those [shifting winds of acquisition policy] have started to blow in the right direction. And as a working-level grunt, I greatly appreciate Admiral Freeman's final remarks, 'Really train and educate the managers—and then get out the way and let them work.'"***

in requirements may then be addressed by modifications during production, or by changing the requirements for the next increment of acquisition, which will begin in a reasonable period of time as opposed to decades.

I agree that the lure of new technology tends to take on a life of its own. If we don't need a new widget, we shouldn't buy a new widget. And if a program isn't going to accomplish what it is supposed to, we should shut it down before it wastes a lot of time and resources.

The requirements process does have to change though. Yes, there are many voices involved now in the requirements process. The result is requirements that require 7 to 10 years' development to fulfill. If the requirements process includes a sanity check so that the requirements and acquisitions strategies match up with each other, we can get on with the process of getting the warfighters what they require.

We do need evolutionary acquisition, but it is a tool like any other. It doesn't apply to all acquisitions, but in some cases it can help balance the problems of schedule vs. cost vs. requirements. That is part of the art of acquisition that Admiral Freeman so rightly discusses in his final paragraph.

Admiral Freeman is also correct that we keep changing horses in mid-stream, reacting to the latest crises, or responding to the ideas of a new administration, before reforms have a chance to prove themselves for better or worse. But reforms also fail because people don't give them a chance, preferring to stick with the checklists that they've used since time immemorial.

We need to change, but not for the sake of change. We need to adapt to changing times and conditions. I've been in DoD acquisition since 1983, and we're doing better now

then we did back then. But we still have a ways to go. I take my position seriously, and view it as my obligation to serve the warfighters and, by extension, this nation, in the best way I know how. Most of the people I have worked with over the past 20 years have the same view.

I'm also a working-level grunt, doing the best I can to respond to the shifting winds of acquisition policy passed down by the high-level policy people in OSD and the respective Services. But lately, in my opinion, those winds have started to blow in the right direction. And as a working-level grunt, I greatly appreciate Admiral Freeman's final remarks, "Really train and educate the managers—and then get out the way and let them work."

As to the lack of historical context in my article, well Admiral Freeman was right; there wasn't any. But I was trying to make a certain set of points, and the article was long enough as it was. It was not meant to be a scholarly treatise, but an opinion piece.

—Alexander R. Slate  
Acquisition Center of Excellence  
Brooks AFB, Texas



# Newport Chemical Agent Disposal Facility Project Management Team

## Leveraging Fidelity of Performance-Based Metric Tools for Project Management

SCOTT S. HARABURDA

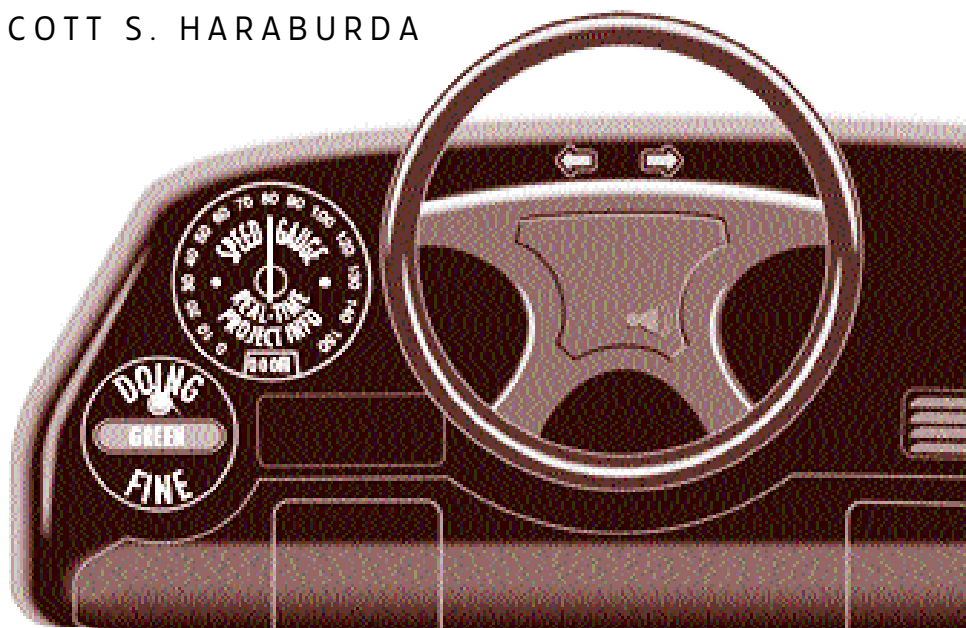
**T**he Chemical Stockpile Disposal Program (CSDP) is a U.S. Army program implemented to achieve destruction of the nation's stockpile of chemical warfare agents by April 29, 2007. In support of that program the Newport Chemical Agent Disposal Facility (NECDF) is being designed to neutralize the chemical nerve agent VX that is stockpiled in bulk quantities at the Newport Chemical Depot (NECD), Newport, Ind. This low-temperature and low-pressure neutralization process provides an alternative to the baseline incineration technology previously selected by the Army for chemical warfare agent disposal.

### A Brief History

During the first couple of years, the project manager for the NECDF project had regularly received massive amounts of project-related data from the project management team. Additionally, the team would provide data and expect the project manager to: 1) interpret the information, 2) identify the major issues and concerns, and 3) provide direction to solve the issues. On a project of this magnitude, their expectations translated into a very time-consuming task for the project manager and a distinct distraction from managing the project's more critical areas.

---

*Haraburda is the Assistant Project Manager for the Newport Chemical Agent Disposal Facility in Newport, Ind., where several tons of VX nerve agent will be destroyed. He holds an M.S. and Ph.D. in Chemical Engineering from Michigan State University and is a registered Professional Engineer (PE) in the State of Indiana.*



**The dashboard, which is similar to the one used in an automobile, has the intent of showing managers the status of their projects in a quick glance. Just like the speedometer on a car's dashboard, which gives a valid metric on the “real-time” speed of the car, a project performance metric should provide useful and timely information to managers.**

To improve communications between the project manager and members of the project management team, an improved method for applying performance metrics on the project was developed. This involved the following:

- Selecting key areas on the project to be assessed periodically using the improved method. As an example, the

following nine project areas were selected: construction, contracting, cost, design, environmental, operations, safety, scheduling, and staffing.

- Appointing individuals, such as subject matter experts, to monitor and maintain the metrics for the key areas selected.
- Developing an effective performance metric for each key area.

- Creating a four-block page that summarizes the important information for each area.
- Establishing a single dashboard page that visually highlights the overall status of the project.

## Performance-Based Metrics

The basic functions of project management involve planning, organizing, controlling, and directing human efforts. Managers should use performance-based metrics as a tool to assist the project manager in these basic functions.

Using just any metrics may



result in a situation creating the illusion that managers are being effective. In essence, using the correct metrics is very important. To ensure that the correct metrics are being used, managers need to understand the type of metric being used and the source of the data used in the metric.

First, the type of metric used is important so that managers can use it to influence the project, as required, to ensure that necessary tasks are accomplished. To facilitate their efforts, managers could look at a process in terms of its three elements: Input, Work, and Results. These elements can be portrayed as functions that depict the interface between the three groups of people within the project: suppliers, the customer, and the project manager/leader (Figure 1).

The type of metric selected should fall within the interfaces between the three groups of people, as they fit into the three elements of the project process.

### Inputs

**Resources.** This refers to the amount and quality of the items used by the project, such as staffing, materials, equipment, tools, utilities, etc.

**Controls.** This refers to the methods and means by which the project manager influences the way work is done. An example of this would include operating procedures, standards, and schedules.

### Work

**Process.** This refers to the way work is done for the project. This includes the efficiency of the work and the compliance with the project's operating procedures/standards.

**Output.** This refers to the amount, quality, and timeliness of the products and services provided by the project. This is

typically supplied to the customer of the project.

### Results

**Feedback.** This refers to the perception of the customers—how they view the project as determined by the demands they place upon the products (output). The use of surveys (proactive) could be used in addition to customer complaints (reactive).

**Outcome.** This refers to the customer's benefits from the products and services resulting from the project.

### Understanding the Source

Finally, the project manager should understand the source of the data for the selected metric. To be effective, the metric should be:

**Accurate.** For the data to be accurate, they must be valid and reliable. Valid data refer to data that can be directly related to factors being measured. One aspect of valid data being collected is that of causality. The manager must take special care to ensure that the data being collected caused the effect to occur. Reliable data refer to data that would be consistent regardless of the data collection technique. An effort should be made to eliminate or minimize errors in data collection due to rater bias, data collection administration, and wording.

**Relevant.** For the data to be relevant, they must be credible and important. Credible data refer to data that will be believable by the people making the decisions, such as managers. Managers should ensure there is a plan or baseline from which to compare, which should include the goals. Important data refer to data that address the important items associated with the factors being measured. For example, managers should not use metrics on trivial items just because they are easy to measure, such as the number of hours that groups of people worked. In this case, a better measurement would be the output of the work performed by these groups.

**Practical.** For the data to be practical, they must be timely, simple, economic,

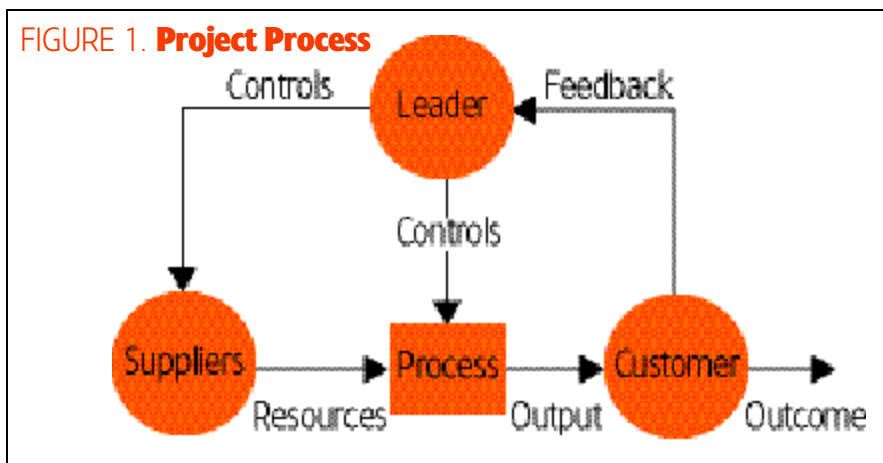


FIGURE 2. 4-Block Metric Page

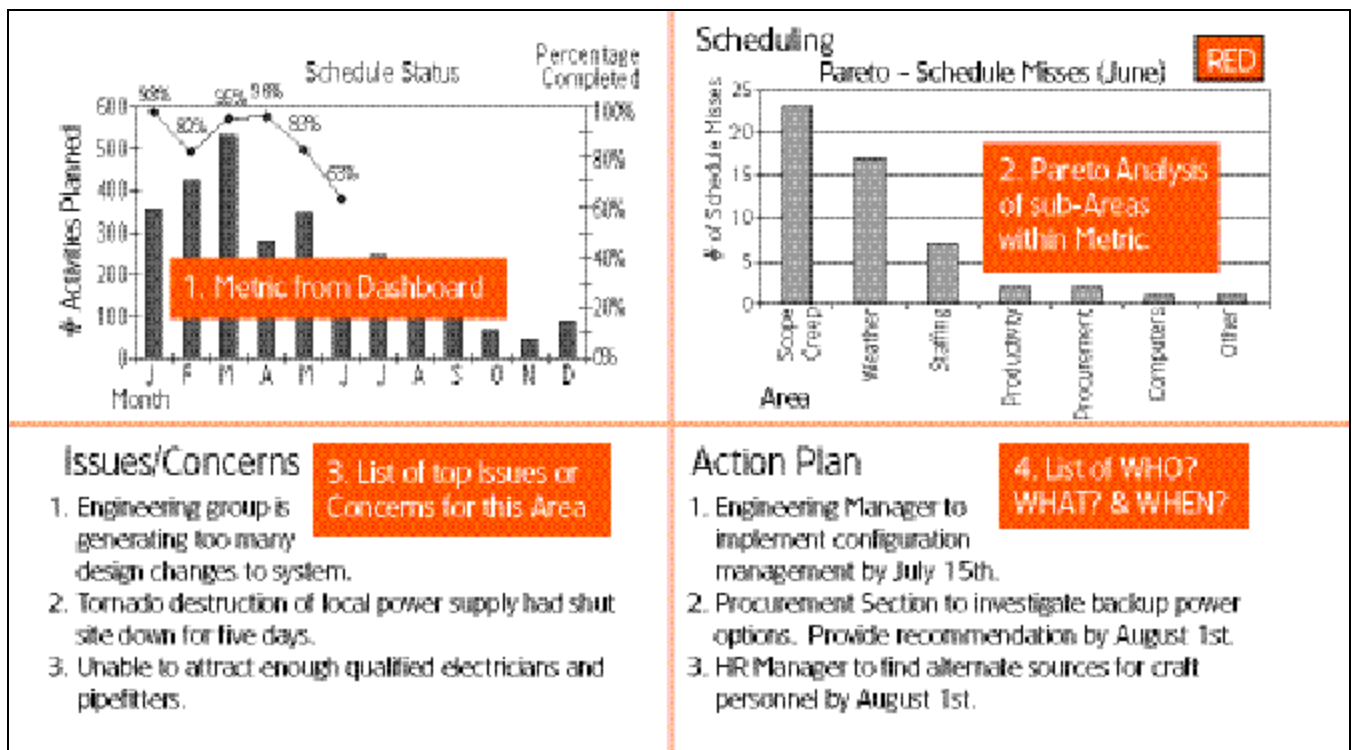


FIGURE 3. Single-Page Dashboard



and unchangeable. Timely data refer to data that can be measured in enough time to be effectively used. Simple data refer to data that are easy to understand. Economic data refer to data that can be obtained within the budget constraints for data collection. Unchangeable data refer to data that cannot be easily distorted to provide different information.

#### Four-Block

Selecting the metrics is important; but, using the metrics is more important. For the NECDF project, a simple four-block page was developed to help the project manager use the metric in managing the project. Figure 2, which is an example of a four-block page for the scheduling area, communicates important project information. This page can be used for each of the critical areas on the project, such as the nine areas previously mentioned.

The first block is a graphical or other depiction of the primary metric from this area. This is the metric that provides the manager a proactive indication of the status of the project for this area. The primary metric for this example is the schedule status using a dual graphic indicating both the number of activities planned for the month and the actual number (in percentage) of those activities accomplished by month.

The second block is another metric that provides more in-depth information about the primary metric in a system-

atic attempt to prioritize the areas of concern. In this example, the Pareto Chart is used as a method to identify the cause of the schedule misses for the current month, grouped into common areas. This is a useful tool to help prioritize the areas for the manager.

The third block is a textual list of the top issues or concerns for the area, such as scheduling in this example. This list can flow directly from the second block, which is the case in this example, or it can come from the individual maintaining the metric by using other sources of information.

The fourth block is the most important block, as this block identifies the action plan for improving the performance of the project. It should clearly identify the individual responsible for the action and the suspense date for that action.

#### Dashboard

The dashboard, which is similar to the one used in an automobile, has the intent of showing managers the status of their projects in a quick glance. Just like the speedometer on a car's dashboard, which gives a valid metric on the "real-time" speed of the car, a project performance metric should provide useful and timely information to managers.

Figure 3 is an example of this single-page dashboard. For the nine areas previously mentioned, a dashboard is constructed using the metric from the first

block shown in Figure 2. Additionally, a visual status is used to provide a quick visual representation of the performance of each area on the project, which was represented by a RAG (Red, Amber, Green) status for each of the nine areas in this example. This status highlights areas in which managers need to pay special attention. For example, a green status indicates that that area is doing fine; whereas, a red status indicates that that area is failing to meet the project objectives.

#### Swamped With Data No More

Project managers are responsible for the outcome of their projects. They normally base their decisions upon data and information obtained, or lack thereof. The effective use of performance metrics and the prioritization of that data help managers in managing their projects. Failure to use effective metrics will foster a situation in which managers are swamped with data, most of which has no effect on the success or failure of the project.

For the NECDF project, this methodology has significantly helped the project management team focus its attention and especially its scarce resources upon the critical issues.

Editor's Note: Haraburda welcomes questions or comments on this article. Contact him at [scott.haraburda@necdf.necd.army.mil](mailto:scott.haraburda@necdf.necd.army.mil).

## DAU AND DMO SIGN STATEMENT OF PRINCIPLES

The Defense Acquisition University (DAU) and Defence Materiel Organisation, Embassy of Australia, Washington D.C., signed a Statement of Principles (SOP) on Oct. 30, 2002, to provide a framework for continuous cooperation in the field of acquisition training. Signing the SOP from left: Frank Anderson Jr., DAU President; and Michael Roche, Under Secretary of Defence Materiel, Australian Department of Defence, Embassy of Australia. Standing from left: Richard Kwatnoski, Office of the Secretary of Defense for Acquisition Technology and Logistics, International Chair; and David Fitch, Dean, Defense Systems Management College.

Photo courtesy Embassy of Australia





# DAU Course Application— Get the Latest Facts

## WHO MAY ATTEND DAU COURSES?

- Military Service members must apply under their Military Service, regardless of their assignment.
- Federal civilians apply under their affiliated Military Service, DoD, or non-DoD Federal Service category.
- Defense industry employees working on DoD contracts apply under their own category.
- Foreign personnel registering under a Foreign Military Sales process apply under a special category. Email Art McCormick at [arthur.mccormick@dau.mil](mailto:arthur.mccormick@dau.mil) if you have questions.

## HOW CAN I APPLY FOR A COURSE?

Go to [www.dau.mil](http://www.dau.mil) and click on *Enroll Here*. Apply for all courses at this site, including distance learning and hybrid courses.

## HOW DOES THE APPLICATION PROCESS WORK?

Each DoD Military Service, e.g., Army, Navy, etc., is assigned quotas in DAU classes. Each agency, including non-DoD, has a specific training office that acts on applications. Each agency, including DoD non-military departments, funds training costs, such as TDY, assists with TDY orders, places its students in a wait or reservation status, or may disapprove an application. Students should contact their agency's POC if they have questions about the status of their application, why they are on a wait list, or how they should prepare their TDY orders. The POC list can be found at [www.dau.mil/registrar/apply.asp](http://www.dau.mil/registrar/apply.asp) at the bottom of the page.

## HOW MUCH DO COURSES COST?

At this time, DAU does not charge tuition for its courses, except for foreign students who register under a Foreign Military Sales process. This category of foreign student, Department of Transportation-related agencies, industry, and non-DoD federal employees fund their own students' travel and per diem costs. For military and civilian DoD employees, there are no travel or per diem costs to the student or the student's agency to attend DAU courses as long as the proper procedures are followed. The Director, Acquisition Career Management Office (DACM) associated with each DoD agency will cover these costs, and students need to follow their processes.

## WHAT ARE CLASS MODES?

Web-enabled courses are strictly computer-based training. The course schedule shows classes running from Oct. 1 to Sept. 30 since enrollment is constant throughout the fiscal year. Once approved for the course, students have 60 days to complete it, 28 days for BCF-102, 90 days for CON-101. After applying, students will receive various messages from "the system," including log on and password information. Students won't be able to log on until they receive a message saying they have a confirmed registration. Students will receive a message telling them whom to contact in case of technical difficulties or questions for an instructor. These messages should be saved for future reference.

Hybrid courses are composed of a Web-enabled phase, lasting about 45 days, followed a couple weeks later by a classroom phase lasting 5 days, except for PMT-352 which lasts 6 weeks. Students must apply for the B phase of a hybrid. They will automatically be enrolled in phase A when they receive a reservation in phase B. Students won't be able to start phase A until about 60 days before phase B starts (45 days for phase A plus 15 days after the Web-enabled phase ends and the classroom phase begins). This is done because the instructor wants the knowledge students acquired in phase A to be fresh in mind when they arrive to class. Students will receive a message telling them whom to contact in case of technical difficulties or questions for an instructor. These messages should be saved for future reference.

On-site or Residential Courses are traditional classroom courses. On-site courses are conducted at sites outside of the DAU campus network. Residential classes are held at a DAU regional campus.

## HOW TO CONTACT THE DAU REGISTRAR?

DAU Registrar

[dau.registrar@dau.mil](mailto:dau.registrar@dau.mil)

Phone:

703-805-3003 (DSN 655-3003) or 1-888-284-4906

Industry and Non-DoD Students

[industry.registrar@dau.mil](mailto:industry.registrar@dau.mil)

Phone

703-805-4498

# AT&L KNOWLEDGE SHARING SYSTEM—AKSS

*REPLACEMENT SYSTEM FOR  
DEFENSE ACQUISITION DESKBOOK UPDATED, MODIFIED*

**E**ffective Jan. 15, 2003, the Acquisition, Technology and Logistics (AT&L) Knowledge Sharing System (AKSS) V1.0 was updated and modified—becoming AKSS V2.0. The transformation from Defense Acquisition Deskbook to AKSS V1.0 represents a fundamental change in Deskbook philosophy.

To provide users with consistently up-to-date content, AKSS points to the location of documents maintained by document owners to the maximum extent possible. AKSS V2.0 expands the mandatory and discretionary reference area, and in particular provides the mandatory references called out in the new 5000 documents. Additional discretionary knowledge resources are provided through ex-

panded online knowledge communities and knowledge areas, reorganized to provide easier access through a “Community Central” area.

A major new function in V2.0 is an improved and expanded search capability. Other new resources include access to DAU's continuous learning modules; expanded information on AT&L education and training; categorized links to related acquisition sites; and government forms, glossaries of terms, and acronym dictionaries. CDs reflecting the current content of the reference library and other user-requested content are also available. AKSS is now online at:

<http://deskbook.dau.mil>

## DEFENSE HONORS MANUFACTURING TECHNOLOGY ACHIEVEMENTS

*Dec. 6, 2002*

**T**he fourth annual Defense Manufacturing Technology Achievement Awards were presented on Dec. 3, 2002, at the Defense Manufacturing Conference in Dallas. Award recipients included government and industry technologists from the Defense Logistics Agency's (DLA's) Apparel Research Network (ARN) program and the Joint Military Service Composites Affordability Initiative (CAI)—Phase 2.

John B. Todaro, Director for the Office of Technology Transition, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, presented the awards.

The awards recognize defense and private sector individuals responsible for developing innovative manufacturing processes that improve the afford-

ability, cycle time, readiness, and availability of defense weapon systems or components that meet the needs of the warfighters.

The ARN was established by the DLA Manufacturing Technology Program to improve the U.S. apparel industry's ability to meet DoD requirements for military clothing. Awards were presented to team members from the DLA; Clemson Apparel Research; Product Data Integration Technologies; AdvanTech; the Manufacturing Productivity Center; the Defense Supply Center Philadelphia; the Marine Corps Recruit Depot, Parris Island; AT&T Government Solutions; and the U.S. Army's Training and Doctrine Command.

Editor's Note: This information is in the public domain at <http://www.defenselink.mil/news>.

# Transforming Technology, Acquisition, and Sustainment

## Focus on the Warrior—Today and Tomorrow

JAY MANDELBAUM • DANNY REED • LEON REED

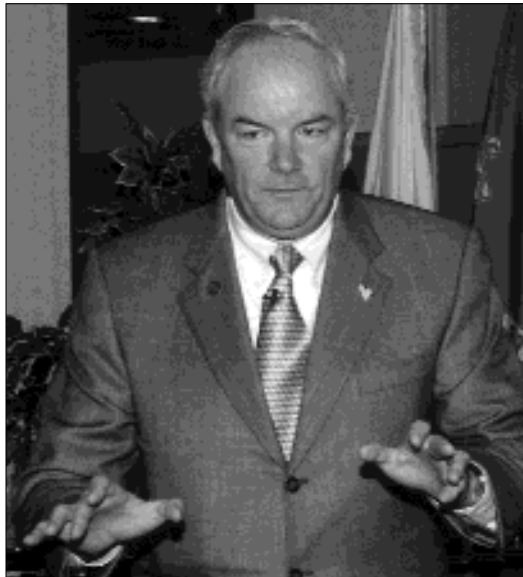
Over 400 members of the acquisition community gathered at Fort Belvoir Nov. 20-22 for the 12<sup>th</sup> Program Executive Officer/Systems Command (PEO/SYSCOM) Commanders' Conference. The 2002 fall conference allowed senior acquisition professionals from the Office of the Secretary of Defense (OSD), the Services, and industry to exchange views on how military transformation and the global war on terrorism are affecting their mission.

### Keynote Address

Navy Adm. Edmund Giambastiani, Commander, U.S. Joint Forces Command, addressed the conference theme in his remarks. "We need an intense and continuous conversation between warfighters and acquisition professionals," Giambastiani emphasized, "to accomplish what we need." He noted that warfighters know what military problems they face, "but they may not know which technologies will help them solve these problems." But, when the acquisition community makes new technologies available, he added, "warfighters know a good technology solution when they see one."

Giambastiani highlighted the warfighters' support for evolutionary acquisition. Citing General Patton's famous aphorism that "a good plan executed violently today is better than a perfect plan tomorrow," he also suggested, by anal-

Principal Deputy USD(AT&L) Michael Wynne. "We are trying to influence dramatic changes in your roles and the way you do business," Wynne told the PEOs and Commanders. "We want to go too far. We want you to push back because otherwise we won't know if we've gone too far, and in fact, we'll suspect we haven't." ▼



ogy, that "an 80 percent solution today is better (and cheaper) than a 100 percent solution tomorrow."

### AT&L Update

Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics Michael Wynne provided an update on AT&L efforts to improve acquisition and sustainment. "We are trying to influence dramatic changes in your roles and the



▲ Dr. Nancy Spruill, Director, Acquisition Resources and Analysis, OUSD(AT&L), provided an overview of the Business Initiative Council (BIC)—Secretary Aldridge's top-level committee to review DoD business practices and develop proposed solutions.

*Mandelbaum is an Operations Research Analyst in the Office of Strategic and Tactical Systems, OUSD(AT&L). Danny Reed and Leon Reed are both members of the Research Staff at the Institute for Defense Analyses (IDA), in Alexandria, Va.*

way you do business,” he told program managers in the audience. He also asked for feedback. “We want to go too far. We want you to push back because otherwise we won’t know if we’ve gone too far, and in fact, we’ll suspect we haven’t.”

Wynne emphasized the importance of reducing acquisition and logistics cycle times. “The system holds us in some disdain for the amount of time it takes to

systems to track with his vision: “It’s never late, it’s always available, it never breaks, and it’s easy to maintain.”

Wynne provided a summary of actions taken to implement recommendations made at the spring 2002 Program Managers’ Workshop. Immediately after the Workshop, his staff reviewed all the recommendations, identified which ones were already underway within AT&L,

you start procuring the system.” He called for adoption of truly evolutionary approaches to the entire requirements, development, acquisition, and test processes, and stated that “the ‘best’ is the enemy of the ‘better than we ever had before.’”

Wynne expressed a continuing commitment to streamlining and simplifying the acquisition process. Policies are being streamlined and more flexibility is being given to the program manager.



▶ Service Acquisition Executives Panel, from left: Claude M. Bolton Jr., Assistant Secretary of the Army (Acquisition, Logistics and Technology); Marvin Sambur, Assistant Secretary of the Air Force (Acquisition); Wynne; John Young, Assistant Secretary of the Navy (Research, Development and Acquisition); Retired Air Force Lt. Gen. Lawrence Farrell, President and Chief Executive Officer, National Defense Industrial Association; and Harry Schulte, Acquisition Executive, Special Operations Command.

▲ DAU and OSD executives from left: DAU President Frank J. Anderson Jr.; DAU Commandant, Army Col. Ronald C. Florn; Spruill; Edward C. “Pete” Aldridge Jr., USD(AT&L); and Donna Richbourg, former Principal Deputy Director, Defense Procurement and Acquisition Policy, OUSD(AT&L).

get a system into production.” Wynne stated that fixing this problem will require “partnering more with the test community up front.”

With the new emphasis on evolutionary acquisition, Wynne said that it’s important to test only “the capabilities that have been introduced.” He also advocated improving the sustainment of new

and then changed the focus of existing initiatives or adopted new initiatives to account for all the panel recommendations.

Wynne cited progress being made in developing “an iterative approach to KPPs [Key Performance Parameters] so they don’t become frozen eight years before



▲ Keynote speaker, Navy Adm. Edmund Giambastiani, Commander, U.S. Joint Forces Command. “When the acquisition community makes new technologies available,” he said, “warfighters know a good technology solution when they see one.”



"We took out the prescriptive and went, where we could, with bare bones. For those of you who never tried to read the 5000 document, it's now readable—on one airplane ride."

He emphasized that "we are still seeking bold ideas," and that OSD is receptive to these ideas. "The paper will never be as blank as it is today," he said, and encouraged members of the AT&L community to "brainstorm what we need to manage better."

## Overview of the Business Initiative Council

Dr. Nancy Spruill, Director, Acquisition Resources and Analysis, provided an overview of the Business Initiative Council (BIC). The BIC is Under Secretary Aldridge's top-level committee to review DoD business practices and develop proposed solutions. The criteria for BIC actions are:

- Does it touch the warfighter?
- Does it provide a common good across all Services?
- Does it have savings/benefits?

Spruill described how the BIC is organized and how it operates. She recounted several rounds of BIC proposals that have been submitted to the Office of Management and Budget or other federal agencies and discussed the status of pending BIC actions. BIC proposals submitted last year and earlier this year included a variety of proposals to gain more flexibility in accounting for funds, increase thresholds under the Truth in Negotiations Act, and streamline technology readiness assessments.

Spruill noted that the BIC's initial legislative proposals did not meet with a lot of success on Capitol Hill. "One of the reasons we did so poorly," she said, "was that our important initiatives showed up too late in the cycle." Congress was already in the process of developing the authorization bill, and it was too late to consider BIC proposals. For this reason, an important part

of the BIC's activities for this year has been to try to streamline the legislative review process within DoD.

## Reducing Total Ownership Costs (R-TOC)

Dr. Spiros Pallas, Principal Deputy Director, Strategic and Tactical Systems, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics), provided an overview of the Reduction of Total Ownership Cost (R-TOC) initiative. R-TOC was initiated three years ago because of concerns about the impacts of aging systems on Operations and Support (O&S) budgets and military readiness, and the perception that defense programs could adopt innovative industry support practices. Thirty systems were designated (10 per Service) as Pilot Programs to document effective approaches to R-TOC.

Dr. Spiros Pallas, Principal Deputy Director, Strategic & Tactical Systems, OUSD(AT&L). "All the R-TOC [Reduction in Total Ownership Cost] projects I'm familiar with," said Pallas, "also give significant improvements in readiness and capability."



▲ Wynne (standing) addresses the Sustainment Panel. Seated are members of the panel, from left: Jim Westphalen, Senior Program Manager, Contractor Logistics Support Programs, Raytheon Co.; Army Brig. Gen. Ed Harrington, Director, Defense Contract Management Agency (DCMA); and Lou Kratz, Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs). Panel member not shown is Amy Barnett, Chief, Fielding and Sustainment Branch, Close Combat Missile Systems Project Office.

Pallas commented that R-TOC has been successful in reducing O&S costs (projected fiscal 2005 savings exceed \$1.3 billion), but maintained that cost savings are not the principal purpose of R-TOC. "All the R-TOC projects I'm familiar with also give significant

improvements in readiness and capability," he said.

Despite the successes, R-TOC continues to have some problems. Among the most significant problems are the difficulty of measuring system O&S costs

(an issue many Pilot Programs have addressed) and the difficulty of obtaining seed money for R-TOC initiatives. OSD has attempted to address the difficulty in obtaining seed money by providing limited R-TOC funds through two Program Budget Decisions, with a third pending.

Pallas stated that R-TOC and other initiatives, such as Cost as an Independent Variable (CAIV) and Value Engineering (VE), are being merged under his leadership. CAIV provides for cost-performance trade-offs through the life cycle of a system, while VE involves the analysis of systems to identify ways that per-

program offices are not preparing them. He also noted that there "has been a precipitous decline in the use of VE," although the program's benefits have been clearly documented. His principal objectives, he stated, will be to expand R-TOC beyond the Pilot Programs and to identify ways to revitalize VE throughout the entire acquisition and sustainment process.

## Technology Transition and the Acquisition Process

Noel Longuemare, former Principal Deputy Under Secretary of Defense (Acquisition and Technology), chaired this panel. Other panel members included:

- Navy Rear Adm. Jay Cohen, Chief of Naval Research
- Tim Harp, Assistant Deputy Under Secretary of Defense (Innovation and Technology Integration)
- Greg Hulcher, Special Assistant for Concepts and Plans, Strategic and Tactical Systems
- Peter Levine, General Counsel, Senate Armed Services Committee
- Air Force Col. Vincent Snyder, Systems Program Director, Intelligence, Surveillance and Reconnaissance Integration Systems Program Office.



▲ Navy Rear Adm. Jay Cohen (left), Chief of Naval Research and Technology served on the "Transition and the Acquisition Process" panel. Chairing the panel was Noel Longuemare, former Principal Deputy Under Secretary of Defense (Acquisition and Technology).

formance can be improved.

"These initiatives all represent good systems engineering," said Pallas, "and all are currently hindered because we don't have nearly as many engineers to do continuous systems engineering as we once did, so if you come up with a good idea, you don't know who to turn to."

Pallas reminded the audience that all programs are required by the Under Secretary to submit CAIV plans. These plans have been coming in to OSD very slowly, and there is a perception that many

The Panel initially focused on DoD's success with Advanced Concept Technology Demonstrations (ACTDs), which are intended to demonstrate a new warfighting capability. Air Force Capt. Winston Campbell began the panel discussions by presenting an overview briefing of the successes and problems with ARGUS, an ACTD that completed development and has made the transition to acquisition.

"We think ACTDs have worked," Harp said. Of the 67 ACTDs that have been seen through to completion, he noted, 80 percent were successful. But the funding gap between the demonstration of the technology and the point where the Service can pick up funding responsibility, he added, can be a problem. With the 71 currently active ACTDs, the sponsors are placing major emphasis on identifying transition funding.

Hulcher added that ACTDs often do not give enough attention to how the technology will be manufactured and deployed. Harp agreed that the approach “if you just want to throw a few out there for evaluation” might be a lot different than the approach a program would take “if you want to transition into the force.”

Levine said that the Armed Services Committee is “very supportive of ACTDs. We believe it’s an important component of the process of transitioning technology.” He stated that Capitol Hill’s concern isn’t so much with the ACTD program “but rather, how DoD handles technologies that aren’t in the ACTD program.”

Cohen stated that “the system works reasonably well and has led to technology dominance,” but both he and Snyder agreed that transition problems are the most serious problems with technology development. In particular, Cohen noted, as a technology developer he is paid to take risks, but the acquisition process has different goals and objectives. “PMs are rewarded for cost, schedule, content, but there is no reward for even moderate risk taking.”

Several panelists raised concerns about funding inflexibility. Cohen noted that after the ACTD has been demonstrated, “if the Service doesn’t have the money, the project doesn’t go forward.” ACTD

# TUTORIALS AND PRESENTATIONS

The entire afternoon preceding the conference proper was given over to three sessions of tutorials on emerging technical or acquisition policy issues. In addition to the tutorials, two special workshop sessions were held that lasted all afternoon. Unlike the tutorials, which were intended to provide updates and feedback on current policy initiatives, these two workshops were intended to be working sessions to grapple with significant new OSD policy actions.

Dr. Spiros Pallas, Principal Deputy Director, Strategic and Tactical Systems, chaired a session examining **Transformation of DoD’s Value Engineering Program**; and Betsy McChesney, Acquisition Review Specialist, Defense Procurement and Acquisition Policy, chaired a session to examine **Acquisition Strategies to Achieve Total Systems Management: A Guide to Increase Reliability and Reduce Logistics Footprint**.

Tutorial topics included:

**DoD 5000 Revision and Evolutionary Acquisition Update**—Skip Hawthorne (OUSD/AT&L)

**Color of Money 101: a Primer on the Who, When, Where, and Why of the Restrictions on Congressional Appropriations**—Siobhan Tack, Professor and Director, Financial Management Department, DAU

**Implementing Performance Based Strategies for Weapon System Life Cycle Support**—Lou Kratz, Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs)

**Business Case Analysis**—Larry “Scoop” Cooper, Director of International Programs, DAU; and Air Force Lt. Col. Lee Plowden, Chief, Transformation Integration Branch, Office of the Deputy Assistant Secretary of the Air

Force (Management Policy and Program Integration)

**Integrating Commercial and Military Manufacturing: More Than Just Commercial-Off-the-Shelf**—Dr. Michael McGrath, Vice President, Sarnoff Corp.

**Chairman Joint Chiefs of Staff Instruction (CJCSI) 3170 Update**—Navy Capt. Jeff Gernand, Chief Strategic and Tactical Systems Branch, J-8, Joint Staff

**Industrial Base Analysis—a Readiness Tool**—William Ennis, Director, Industrial Analysis Center, DCMA

**Missile Defense: Acquisition Innovation in Practice**—Rob Brown, Assistant Deputy for Program Integration, Missile Defense Agency

**Planning and Executing Integrated Technical Performance Measures—the Precursor to and Predictor of Risk and Earned Value Performance**—Richard Zell, Director, Supplier Operations, DCMA; and Mike Ferraro, General Engineer, Contract Technical Operations, DCMA

**Technology Readiness Assessments**—Janne Spriggs, Plans and Programs, Office of the Director, Defense Research and Engineering; and Jack Taylor, Associate Director for Ground and Sea Systems, Office of the Deputy Under Secretary of Defense (Science and Technology)

**DLA Initiatives to Improve Support to Weapons Systems**—Doug Walker, Chief, Weapon Systems Support, Defense Logistics Agency

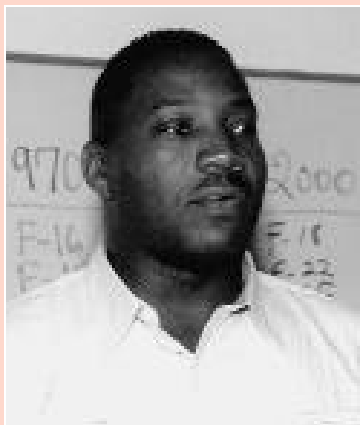
**Applying Full Service Contracting in Support of Complex Weapon Systems**—Joe Grossom, Director, Lifetime Support Business Area, Lockheed Martin Systems Integration; Jack Blalock, Business Development Manager, Northrop Grumman Newport News; and John Goodhart, Assistant Deputy Commander, Fleet Logistics Support



DoD 5000 Revision and Evolutionary Acquisition Update—Skip Hawthorne (OUSD/AT&L).



Color of Money 101: a Primer on the Who, When, Where, and Why of the Restrictions on Congressional Appropriations—Siobhan Tack, Professor and Director, Financial Management Department, DAU.



Business Case Analysis—Air Force Lt. Col. Lee Plowden, Chief, Transformation Integration Branch, Office of the Deputy Assistant Secretary of the Air Force (Management Policy and Program Integration).

funding can help bridge this gap, but that transition still represents a difficult challenge for the project and a primary area of risk.

## Requirements and Acquisition Integration Panel

Ric Sylvester, Deputy Director, Defense Procurement and Acquisition Policy, chaired a panel on Requirements and Acquisition Integration. Panel members were:

- Coast Guard Cmdr. Carl Alam, Aviation Program Manager, U.S. Coast Guard Deepwater Program
- Navy Capt. Jeff Gernand, Chief of Strategic and Tactical Systems Branch, Requirements and Acquisition Division, J-8/Joint Staff
- Charles Greco, Deepwater Aviation Program Manager, Integrated Coast Guard Systems
- Dr. Glenn Lamartin, Director, Strategic and Tactical Systems, OSD
- John Landon, Deputy Assistant Secretary of Defense (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance [C3ISR], Space, and IT [Information Technology] Programs).

Lamartin stated that there is “a wide range of things we need to do better. We need to reduce the cost of owning systems, reduce the logistics tail, and get more capability to the warfighter, quicker.” One of his primary objectives, he said, is to “drive the systems engineering process back into defense acquisition.”

Landon stressed the importance of interoperability and block development. “No program or platform will be developed as a standalone system any more. All we’re interested in is development of an integrated capability.”

Alam and Greco gave the government and industry perspective on the Deepwater Program, the Coast Guard’s new program to define its major systems requirements for the next 30 years. The program is based on performance-based acquisition, and the government has developed a close partnership with the sys-

tems integrator. The government avoided specifying particular pieces of hardware, instead focusing on the mission that must be performed. The contractor’s objectives include trading off total ownership cost and the system effectiveness of various options.

Greco noted that the contract has a potential term of 30 years and also includes sustainment of the legacy fleet. The government and contractor teams are colocated, which has given the contractor “the unique opportunity of dealing with our customer, who is now our partner, in an extremely collaborative way.”

Gernand described changes that are underway in the Joint Staff requirements development process. “For the first time we’re going to ask the Services and combatant commands to sit down around the table and work it out together.” The emphasis in the future will be on capability-based requirements. A new Functional Capabilities Board is being developed to deliver “solutions that are born joint.”

## Q&A Session with Service Acquisition Executives

Wynne chaired an evening panel of the Service Acquisition Executives and other senior officials. The panel members were:

- Claude M. Bolton Jr., Assistant Secretary of the Army (Acquisition, Logistics, and Technology)
- John Young, Assistant Secretary of the Navy (Research, Development and Acquisition)
- Marvin Sambur, Assistant Secretary of the Air Force (Acquisition)
- Harry Schulte, Acquisition Executive, Special Operations Command (SOCOM)
- Retired Air Force Lt. Gen. Lawrence Farrell, President and CEO, National Defense Industrial Association.

After brief initial statements by each panelist, the panel took questions from the audience for nearly two hours. Bolton noted one important development in his organization is reflected in his job title: the responsibility for logistics has been merged with acquisition and tech-



nology. He stated that the Army has tasked its program managers to have cradle-to-grave responsibility for programs, "and we're going to make sure you have the wherewithal to make it happen, from the policy point of view and eventually encompassing the money as well." Bolton also said that his office is taking a broad look at how the Army does business and will place an increasingly heavy emphasis on business issues in acquisition, logistics, and Science and Technology (S&T) programs.

Young praised the creativity and dedication of people involved in the acquisition process. He mentioned the Joint Strike Fighter, which he said was a good program but, until recently, the award fee provisions in the contract were not well thought out. The key to restructuring the contract, he told the PEOs and commanders, was to key award fee to schedule events rather than relying on subjective factors. He also stressed that the Services need to work jointness every day and praised the progress being made within the Navy.

Sambur said a primary goal of his was to gain agility in the acquisition process and to gain credibility for the acquisition process with outside organizations. He also said it was extremely important to "institutionalize collaboration between the warfighter, test, acquisition, and S&T," to ensure that the most promising technologies get into the warfighter's hands. He said industry is a vital part of the team and needs to be included in the collaborative process as well.

Schulte described how his acquisition process differs from Service acquisition processes, and how it is similar. He said that the requirements process was somewhat quicker at SOCOM, but that the budgeting process is no more effective. He believes acquisitions move more quickly, but "mostly because we're smaller—so small we can be really tight with the user." He said that the post-Sept. 11 atmosphere "has changed things a lot" for SOCOM. Missions are more urgent, and people recognize how important their job is.

Farrell commented on some best practices that could be adopted by the Services. Partnership was one best practice, he maintained, that is not consistently practiced within the Services. He also recommended that the Services should track stability of requirements, most particularly exercising control over the number and scope of KPPs. Finally, he recommended that the programs should bring industry into evolutionary acquisition discussions at an early stage of the program, to make sure industry understands the ultimate direction the program is headed as well as the crucial front-end requirements.

### **Value Engineering Award Ceremony**

For the first time, DoD's annual VE awards ceremony coincided with the PEO/SYSCOM Commanders' Conference. Wynne and Pallas presided at these awards, and complimented the award winners for their contributions to national security. (For a complete list of winners, see the November-December 2002 issue of *Program Manager*, p. 58.)

### **Innovation and Technology in Support of the Warfighter: an Industry Perspective**

Mark Ronald, Chief Operating Officer, BAE Systems, and President and CEO, BAE Systems North America, provided his perspective on the conference theme. He stressed that industry is fully committed to delivering good value to the warfighter and pledged whatever assistance is needed.

Ronald commented on the need to continue to take actions to attract and motivate a skilled workforce, which is necessary to maintain state of the art capabilities. "We're on a honeymoon," he said. "The dot coms have collapsed and the telcoms are hurting, but over time our ability to attract the right people is at risk."

Ronald suggested that DoD should provide clearer guidance on teaming and vertical integration. Industry is willing to play by the rules, but it isn't always clear what DoD wants. He commented that the industry consolidation is likely

to continue, probably more at the lower tiers than among the few large primes, and that this can influence DoD's ability to maintain competitive markets. He also suggested that DoD should provide firmer guidance on when and where Prime Integrating Contractors will be used. Again, he said, industry is willing to play by DoD's rules but sometimes these rules are not articulated clearly.

### **Sustainment Panel**

Retired Air Force Lt. Gen. Tom Ferguson chaired this panel. Other panel members included:

- Army Brig. Gen. Ed Harrington, Director, Defense Contract Management Agency (DCMA)
- Lou Kratz, Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs)
- Amy Barnett, Chief, Fielding and Sustainment Branch, Close Combat Missile Systems Project Office
- Jim Westphalen, Senior Program Manager, Contractor Logistics Support Programs, Raytheon Co.

Barnett and Westphalen provided an overview of a program that is considered a sustainment "success story"—the Improved Target Acquisition System (ITAS). Barnett noted that the support goal for ITAS was to improve systems availability while reducing O&S costs. The Army negotiated a Contractor Logistics Support (CLS) contract with Raytheon for this program.

Barnett stated that Operational Readiness (OR) rate is a key system performance metric and a key metric for the contractor. A minimum OR rate of 90 percent is established in the contract, with incentives for exceeding the target and penalties for falling short. OR rates have averaged 99.5 percent since the system's inception. Surge and contingency clauses were built into the contract and have been exercised.

Funding issues represent a continuing challenge for ITAS. ITAS is not included in the Army Working Capital Fund, and there has been no easing of "color of money" restrictions. Barnett also com-

mented that there is no good, reliable O&S cost information for legacy systems, though information systems are getting a little bit better. With all the colors of money and all the pots of money, funding is too scattered to track the costs for a single system.

Westphalen seconded Barnett's comments from the contractor point of view. He said that the government-industry Integrated Product Team was a true partnership. The parties worked the statement of work together and ultimately there was an agreement between the tactical units, Raytheon, and the program manager. All three parties were essential to the arrangement's success.

Harrington stated that DCMA has become far more involved in the sustainment phase of contracts. The changes in the way the agency does business have resulted in far more contact with the logisticians, not just the program managers. He has stressed responsive-

ness to the agency's staff. "We need to go where the important work is for our customers—out in the field."

Kratz commended the ITAS program and described it as a very successful example of Performance Based Logistics (PBL). He said that successful examples like ITAS have been very influential in shaping DoD's approach to PBL. "In the initial PB support contracts," he commented, "we had lots of metrics, but have now concluded that fewer metrics are better. The emphasis should be on output."

Kratz seconded Barnett's view that PBL does not exacerbate "contractors on the battlefield" problems. He asserted that most contractors on the battlefield probably are not tied to weapon systems; instead, they're doing combat support or combat service support. Also, there are a good number of contingency sustainment personnel, hired by the operational forces to provide sustainment support.

"We are trying to help the Services carry out their stated policies and minimize contractors on the battlefield."

### Conference Challenge

USD(AT&L) Edward C. "Pete" Aldridge Jr. concluded the conference. He thanked everyone for attending and emphasized to the audience how vital they were to the success of our fighting forces. "Your work as program managers has never been more important." He challenged those assembled to provide the troops the tools they need, in as short a time as possible. In closing, he said "you're doing a superb job."

Editor's Note: The full text of Secretary Aldridge's remarks begins on the following page. For information on past or future conferences, visit the PEO/SYSCOM Conference Web site at <http://www.acq.osd.mil/ar/peoindex.htm>.

## DEFENSE ACQUISITION UNIVERSITY AND UNIVERSITY OF ALASKA ANCHORAGE SIGN MEMORANDUM OF UNDERSTANDING

The Defense Acquisition University (DAU) and the University of Alaska, Anchorage (UAA) signed a Memorandum of Understanding (MOU), during a ceremony held at the DAU West Region campus, San Diego, on Sept. 25, 2002. The MOU, which formalizes the DAU-UAA strategic partnership, calls for establishing cooperative training and educational programs in the areas of logistics and supply management. Signing the MOU from left: Kevin Carman, DAU West, Associate Dean; Andy Zaleski, Dean, DAU West; and Dr. Hayden Green, Dean, Graduate Business School, University of Alaska, Anchorage.

Photo courtesy University of Alaska



# Priorities and Acquisition

## “Your Work As Program Managers Has Never Been More Important or Anticipated”

E.C. “PETE” ALDRIDGE, JR.

Editor's Note: The remarks that follow were delivered by Secretary Aldridge on Nov. 22, 2002, at the PEO/SYSCOM Commanders' Conference, held at the Defense Acquisition University, Fort Belvoir, Va.

I'm very pleased to be addressing you once again. Many of you will perhaps recall our meeting one year ago. It took place only a couple of months after the attacks.

At that time the atmosphere within the Defense Department was one of busy anticipation. We did not know exactly what the future held, but we were certain that there would be accelerations in operations, logistics, acquisition, transformation, and research and development.

All of those accelerations have come to pass—some with greater velocity than others; some with higher urgency than others. But the promise of increased pacing has come to pass for just about all of us.

Your work as program managers has never been more important or anticipated. I have heard it said that only God can forgive Osama bin Laden and his fellow terrorists, but it is the job of our military to arrange the face-to-face meetings.

Today is the 284th anniversary of the violent death of a violent man: the foremost terrorist of his age—the pirate Edward Teach, also known as “Black Beard.”

On this day in 1718, Teach was cornered aboard his ship, the *Adventure*, in

We are by no means finished with [my] original five goals, and we will continue to push for the accomplishment of each one. We have a strong momentum going and we have no intention of squandering it.

the Outer Banks of Carolina. His pursuer was a young Royal Navy Lieutenant who, in a dramatic hand-to-hand fight, cut off Black Beard's head with a cutlass. His headless body was thrown overboard and legend has it that before it sank, it swam around the ship several times.

This is vaguely familiar. Every time we receive another questionable audio tape from bin Laden, it is as if he has taken another lap around the ship.

But in this new age of effects-based operations, having his head on a pike is not intrinsically important. Our troops are arranging the face-to-face meetings on a daily basis. Your job is to give them the tools to do that. And you have done that very well.

### Five Additional Objectives

Last year, I told you about the five goals that comprise my agenda as head of defense acquisition. I also told you about some of the things we intended to do over the subsequent year to realize those goals.

This year, I would like to update you on the progress we have made on those original objectives, and let you know about five additional priorities that the Secretary and I believe will best serve the needs of our country and the Defense Department in the months to come.

This summer Secretary Rumsfeld asked me to outline my top priorities for the next 18 months. I did so and he approved them. Let me give you a quick overview of what those priorities are.

### Continue Progress with Original Five Goals

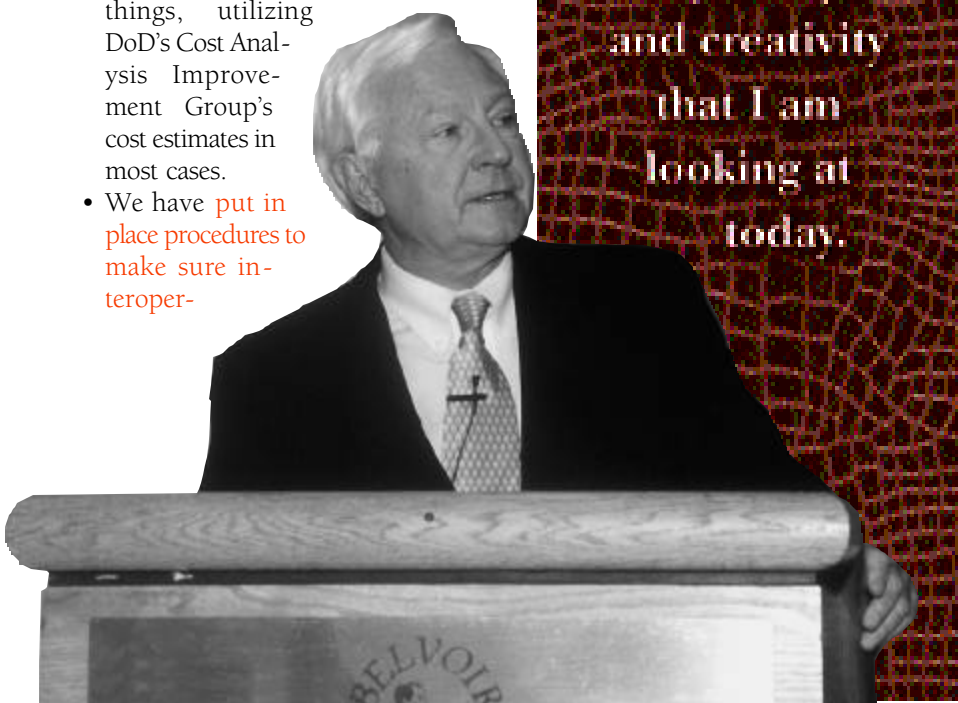
The first priority is to continue the progress we have made with my original five goals. As you know, those goals are:

- to improve the credibility and effectiveness of the acquisition and logistics support process;
- to revitalize the quality and morale of the AT&L workforce;
- to improve the health of the defense industrial base;

- to rationalize the weapon systems and infrastructure with our defense strategy; and
- to initiate high-leverage technologies to create the warfighting capabilities and strategies of the future.

Discussing in detail the progress we have made on each of those goals would be a speech in itself. Nonetheless, the accomplishments of our acquisition workforce have been remarkable, and I cannot proceed without at least a cursory rundown of some of our more important ones.

- We have **revitalized the Defense Acquisition Board**, replacing the assistant secretaries for acquisition from each Military Service with the Service Secretaries themselves. This change better reflects the breadth of issues we face in acquisition matters. It has brought some welcome stability to many programs, while reducing the decision time. And it brings to bear all the resources of each Military Department.
- We have **mandated evolutionary, spiral development of weapons systems**. This will enable us to field capable equipment more rapidly at lower cost and less risk.
- We are **ensuring that programs are properly priced** by, among other things, utilizing DoD's Cost Analysis Improvement Group's cost estimates in most cases.
- We have **put in place procedures to make sure interopera-**



Many before me,  
many before the  
Secretary,  
have given  
lip service to the  
notion that  
our people are our  
greatest strength.  
When the new  
[5000 series] is in  
place, we will have  
acted on that  
belief by taking  
the shackles off  
of the talent,  
capability,  
and creativity  
that I am  
looking at  
today.

ability is properly considered, and done so earlier in a program's life [cycle].

- We have **consolidated and dramatically improved our acquisition education**. This was vital if we are to exercise the innovative and progressive management of our technology and systems development efforts. I hope this [PEO/SYSCOM Commanders' Conference] will help us further develop the education concepts we need for the future.
- We have finally **established parity between the acquisition of equipment and the acquisition of services in the review process**.
- We have **implemented "Technology Readiness Assessments"** to determine when a program is ready to proceed to the next step in its development.
- We have contributed to the health of the defense industrial base by **facilitating additional profitability among contractors**.
- We have **restored the role of science and technology to our national defense** by setting the goal that 3 percent of the DoD budget be reserved for science and technology. We are now very close to that figure, and will continue to push for the entire 3 percent.
- We are also **exploiting the enormous potential of Advanced Concept Technology Demonstrations**. I'll have more to say on the role of technology in a moment.

We are by no means finished with these original five goals, and we will continue to push for the accomplishment of each one. We have a strong momentum going, and we have no intention of squandering it.

Under Secretary of Defense (Acquisition, Technology and Logistics) Edward C. "Pete" Aldridge Jr., speaking at the PEO/SYSCOM Commanders' Conference on Nov. 22, 2002. The fall 2002 conference was held at the Defense Acquisition University, Fort Belvoir, Va.

Photo by Richard Mattox



## Re-Engineer AT&L

Our second priority for the next 18 months is to “Re-engineer” the office of Acquisition, Technology and Logistics. Over the years we have accumulated many “management” functions that are inappropriate for an office that should concentrate instead on policy and oversight.

We are going to eliminate marginal activities and transfer certain functions that can be better accomplished elsewhere. This is consistent with the Secretary’s direction to reduce the size of the Office of the Secretary of Defense and to focus our efforts on Excellence in Acquisition.

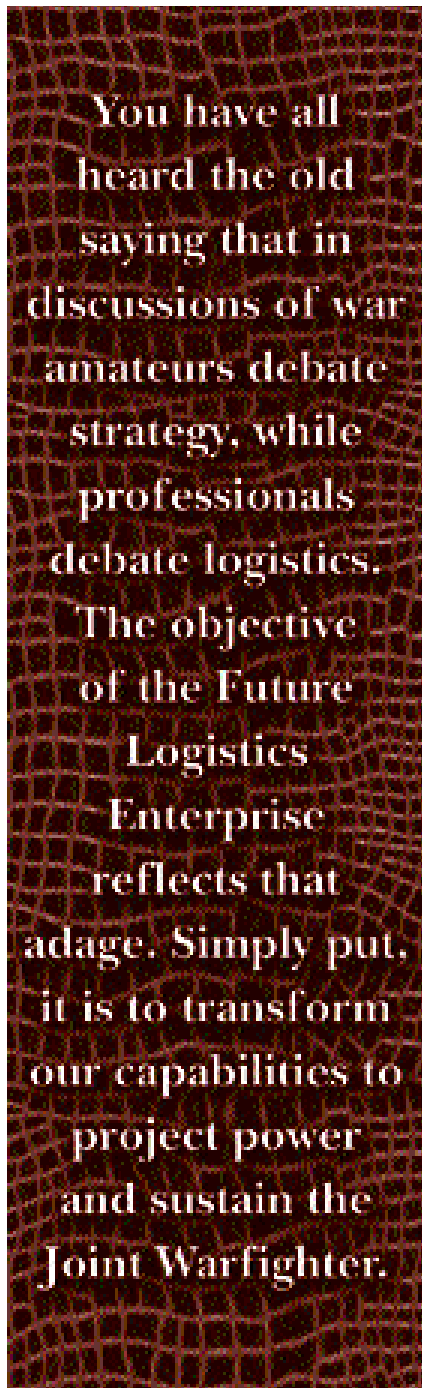
Something else that was directed by the Secretary is the war on bureaucracy. The day before last year’s attacks, he announced his determination to rationalize the DoD’s dependence on bureaucracy, much of which is self-defeating in its outcome and mind-boggling in its execution. One of the engines of that effort within AT&L is the cancellation of the current DoD 5000 [series documents].

In his memo dated October 30<sup>th</sup>, Deputy Secretary Wolfowitz was clear. He said that the objective of this action is to “...create an acquisition policy environment that fosters efficiency, flexibility, creativity, and innovation.”

This is consistent with one of the President’s guiding management principles—what he calls the “Freedom to Manage.” From my perspective, that principle represents a welcome breath of fresh air.

I am a big believer in the dangers of micromanagement. It is often said that if you want to develop leadership, initiative, and versatility among subordinates, assign them an objective, then avoid micromanaging their execution. The authors of the current DoD 5000 series obviously did not follow this guidance.

Whatever replaces the 5000 will be much less prescriptive, and will allow managers more discretion. It will foster



initiative, speed, and efficiency. We hope to reduce the 250 pages of directive, with 40 pages of guidance.

Many before me—many before the Secretary—have given lip service to the notion that our people are our greatest strength. When the new guidance is in place, we will have acted on that belief by taking the shackles off of the talent, capability, and creativity that I am looking at today.

## “Acquisition Excellence” Plan

Third, we are going to develop an “Acquisition Excellence” Plan for all major weapon systems. The objectives here are four-fold: We intend to reduce acquisition cycle time, minimize program risks, enhance stability, and keep costs under control.

The importance of this goal is self evident when you consider the significance of some of the programs we have under way.

- We have to keep the Joint Strike Fighter on track.
- We must implement a deployment plan for missile defense;
- We must decide the architecture for the Army’s Future Combat System;
- We must establish a development plan for the Navy’s DD-X program and the resulting family of ships;
- We need to develop a balanced program for “information dominance” to include a new wideband communications system;
- We must rationalize the next generation of platforms for the new “strategic forces posture” that will result from the Nuclear Posture Review;
- We need to complete the road map for Unmanned Aerial Vehicles and Unmanned Combat Aerial Vehicles; and
- We need to complete the plan for the development and production of new precision munitions.

## Complete Plans for “Future Logistics Enterprise”

As my fourth priority, we will complete our plans for what we call the “Future Logistics Enterprise.” I’m sure you have all heard the old saying that in discussions of war amateurs debate strategy, while professionals debate logistics. The objective of the Future Logistics Enterprise reflects that adage. Simply put, it is to transform our capabilities to project power and sustain the Joint Warfighter.

It establishes a clear vision by which our logistics will better support our operational requirements. It will enable us to project and sustain our forces anywhere

on the globe through end-to-end customer service and enterprise integration.

The Future Logistics Enterprise effort is divided among three areas: weapon system support, customer support, and enterprise support. Progress has been made in all these areas, but the task is still in the early stages.

We must continue to push for the completion of a shared data environment and a new "Demand Management System" to reduce customer wait time, maximize customer satisfaction, reduce costs, and minimize inventories of supplies. We must also determine the proper organizational structure to implement the new logistics enterprise.

### **Accelerate Flow of Technology to the Warfighter**

I told you a moment ago that I would return to the subject of technology. Our fifth priority is to accelerate the Flow of Technology to the Warfighter.

Let me read a quote to you from the noted British military historian and analyst, John Keegan:

**"The brief Afghan campaign revealed that terrorists are as dependent as regular armies on bases and training facilities, on regular lines of supply, and on infusions of manpower to replace casualties."**

Clearly, terrorists have vulnerabilities just like any other human organization, and technology, though unable to exploit all of them, is certainly playing a dominant role in this war. In fact, if ever there was a techno-centric war, this one is surely it.

Already we have exploited our advantages in airlift, space dominance, communications, UAVs, precision guided munitions, and sensor technology to name just a few.

And we have uncovered a need to further develop bandwidth technology, unmanned combat air vehicles, information technology, interoperability, and system of systems capabilities.

**Quality  
[Research and  
Development]  
is not cheap,  
but it is worth  
every penny.  
Every unmanned  
aircraft shot down,  
every bullet  
deflected by  
advanced body  
armor, represents  
a visit not paid  
to a spouse  
or parent  
by a military  
chaplain.**

Our experiences this past year have underlined the need for vibrant and robust research. We have restored DARPA [Defense Advanced Research Projects Agency] to the high-risk, high-payoff focus that characterized it years ago. We intend to keep that momentum going through commitment and money.

Quality R&D is not cheap, but it is worth every penny. Every unmanned aircraft shot down, every bullet deflected by advanced body armor, represents a visit not paid to a spouse or parent by a military chaplain.

But current, or mature, technologies have also proven to have great utility

when used in creative ways. And that could almost serve as the definition of Advanced Concept Technology Demonstrations. We intend to expand these demonstrations to take advantage of some of the valuable technologies already out there.

Clearly, the events of one year ago have had an effect on the course this office has steered. Our war footing has presented us with both challenges and opportunities. Yes, our workload has increased. Yes, DoD's priorities have changed, and must remain flexible.

And yes, this war has elevated the need for the transformation of our defenses. That is most welcome. If you were here last year, you may recall a prediction I made. I stated that this war will either provide a springboard to transformation, or it will sanction the status quo. I also expressed my determination that history not record the latter option.

One year later, I am pleased to report that we are well on our way to recasting our military into a force that is truly prepared for the challenges of the 21<sup>st</sup> century.

Now is the time to recommit ourselves to maintaining this momentum. We must keep pushing for capabilities that are lighter, faster, and more interoperable. We must continue to exploit our clear advantages in information technology and space dominance.

If we do so, we will be leveraging our forces with the greatest advantage that free nations possess over the tyrants who currently oppose us:

I'm talking about our traditions of free inquiry, vibrant debate, the scientific method, unfettered research, and capitalist production.

To say that this current war is one of liberty against oppression is not empty platitude. The benefits of the former over the limitations of the latter have always served us well, and will not fail us now.

# DAU Guidebooks Available At No Cost to Government Employees

## A COMPARISON OF THE DEFENSE ACQUISITION SYSTEMS OF AUSTRALIA, JAPAN, SOUTH KOREA, SINGAPORE, AND THE UNITED STATES

**Author:** Stefan Markowski

**Editor:** Tony Kausal

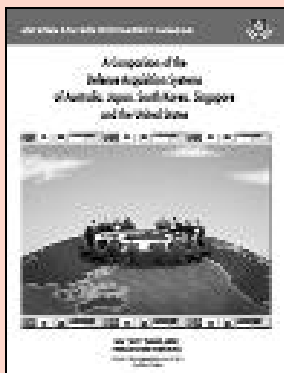
**T**his guidebook describes the national armament systems of Australia, Japan, South Korea, Singapore, and the United States. Beginning with an introduction to the political environment, the acquisition organizations, systems, and processes involved, Kausal and Markowski describe the effects of differences in national culture and traditions, time zones, currencies, fiscal year schedules, and language barriers. Tying these differences to each nation's national armament system, the authors make the case that international armaments cooperation is a difficult but rewarding challenge.

### Online

<http://www.dau.mil/pubs/misc/acq-comp-pac00.asp>

### Printed Copy

To request a printed copy of *A Comparison of the Defense Acquisition Systems of Australia, Japan, South Korea, Singapore, and the United States*, choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: OP-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) e-mail [jeff.turner@dau.mil](mailto:jeff.turner@dau.mil).



### Printed Copy

To request a printed copy of *Acquisition Guide for Interactive Electronic Technical Manuals* (September 1999), choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: OP-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) e-mail [jeff.turner@dau.mil](mailto:jeff.turner@dau.mil).

## INCENTIVE STRATEGIES FOR DEFENSE ACQUISITIONS GUIDE

*Printed on behalf of the Office of the Deputy Under Secretary of Defense for Acquisition Initiatives by the Defense Acquisition University Press*

**I**ncentives should exist in every business arrangement because they maximize value for all parties. DoD needs to adopt strategies that attract, motivate, and reward contractors to encourage successful performance. Using commercial practices will enhance DoD's ability to attract nontraditional contractors. This guide amplifies existing policy regarding use of incentives in defense acquisitions. It explores cost-based and noncost-based incentive strategies. It clearly defines use of performance objectives or product functionality vs. detailed requirements to seek best value acquisitions. It answers these questions:

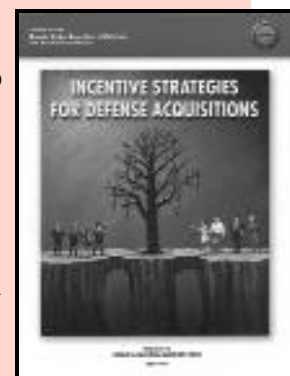
- Why are we concerned with contractual incentives?
- What elements contribute to an effective incentive strategy?
- How can we build and maintain an effective environment for a successful business relationship?
- How can we build the acquisition business case?
- How can we build an incentive strategy that maximizes value?

### Online

<http://www.dau.mil/pubs/misc/incentive.asp>

### Printed Copy

To request a printed copy of *Incentive Strategies for Defense Acquisitions* (April 2001), choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: OP-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) e-mail [jeff.turner@dau.mil](mailto:jeff.turner@dau.mil).



## ACQUISITION GUIDE FOR INTERACTIVE ELECTRONIC TECHNICAL MANUALS

**T**his guidebook is designed as the primary desk reference for acquisition personnel who must acquire, develop, deliver, and manage Interactive Electronic Technical Manuals (IETMs). It incorporates the status of existing/planned DoD and Service-unique policy guidance, discusses current and projected technologies related to the production of IETMs, analyzes the relationships between IETMs and training, and addresses delivery vehicles, including the World Wide Web.



### Online

<http://http://www.dau.mil/pubs/misc/ietm.asp>

# DAU Guidebooks Available At No Cost to Government Employees



## PERFORMANCE-BASED SERVICE ACQUISITION IN THE DEPARTMENT OF DEFENSE

*Printed on behalf of the Office of the  
Deputy Under Secretary of Defense for  
Acquisition Reform by the Defense Ac-  
quisition University Press, March 2001*

**T**he Department of Defense has the responsibility to acquire services with the most efficient practices and processes. Performance-Based Service Acquisition (PBSA) strategies strive

to adopt best commercial practices. They provide the means to reach world-class commercial suppliers, gain greater access to technological innovations, maximize competition, and obtain the best value to achieve greater savings and efficiencies.

This handbook highlights key elements of PBSA, investigates the use of market research, introduces the performance-based work statement, and establishes measurable performance standards. It covers incentives and remedies, using assessment and quality control plans, and it enumerates evaluation factors of source selection. Finally it discusses contract administration, particularly in regard to post-award orientation and documentation of contractor performance.

### Online

<http://www.dau.mil/pubs/misc/pbsa.asp>

### Printed Copy

To request a printed copy of *Performance-Based Service Acquisition in the Department of Defense*, choose one of three

options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: OP-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) e-mail [jeff.turner@dau.mil](mailto:jeff.turner@dau.mil).

## TEST AND EVALUATION MANAGEMENT GUIDE

*4th Ed., November 2001*

**T**he objective of a well-managed T&E program is to provide timely and accurate information. This

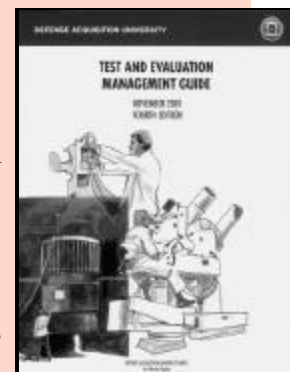
guide has been developed to assist the acquisition community in obtaining a better understanding of whom the decision makers are and determining how and when to plan test and evaluation events. The guide is written for current and potential acquisition management personnel who are familiar with basic terms and definitions employed in program offices.

### Online

[http://http://www.dau.mil/pubs/gdbks/test\\_evalu\\_guide.asp](http://http://www.dau.mil/pubs/gdbks/test_evalu_guide.asp)

### Printed Copy

To request a printed copy of the *Test and Evaluation Management Guide*, choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: OP-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) e-mail [jeff.turner@dau.mil](mailto:jeff.turner@dau.mil).



## Inside DAU

**A**ir Force Lt. Col. Caisson M. (Caise) Vickery was named Executive Director, E-Learning and Technologies Center, effective Jan 6, 2003. Vickery comes to DAU from the National Reconnaissance Office where he served as the Director of the Acquisition Center of Excellence. During his 18-year Air Force career he has served as a warranted procuring contracting officer in three different organizations. A graduate of Harvard University, Vickery also holds a master's in Contracting Management from the Air Force Institute of Technology and a Ph.D. in Information and Management Sciences from Florida State University.

**M**ark C. Whiteside was named Executive Director of Performance and Resource Management effective Oct. 24, 2002. Whiteside comes to DAU from private industry having worked as a Chief Financial Officer for the

last 14 years in government contracting companies located in the Washington D.C., area. His career in Corporate finance spans 18 years and runs the gamut from compiling and analyzing budget and financial data to managing Accounting departments, Human Resource departments, Contracts departments, Facility departments and Management Information Systems (MIS) departments. Most recently he served as Executive Vice President of Business & Finance at Innovative Logistics Techniques Inc. (INNOLOG), where he was responsible for managing all accounting functions, cash management, bank financing, contract management, budgeting and planning, auditing, and mergers & acquisitions. Whiteside graduated from The George Washington University with an M.B.A. in Finance. He also holds an Undergraduate degree from the University of Maryland.



# PROGRAM MANAGER MAGAZINE 2002

## A QUICK REFERENCE FOR LAST YEAR'S ARTICLES

### J A N U A R Y — F E B R U A R Y

Title	Page	Simulation and Modeling for Acquisition, Requirements, and Training—SMART (Bruce J. Donlin • Michael R. Truelove)	
Pentagon Renovation Program (Lester M. Hunkele III • W. Lee Evey)	2		62
ATEC Names Program/Project Manager of the Year (Phillip Washburn)	22	DAU to Offer New Program Management Office Course (PMOC) (Ken Bloom • Bill Bahnmaier)	76
DoD Enterprise Solutions (Ron Klein)	26	Army Set to Introduce “CAT” (Col. Terrell W. Mathews, USAR)	82
When Leaders Fail (Bob Rue)	30	Reduction of Total Ownership Costs (R-TOC) (Dr. Spiros G. Pallas • Michael J. Novak)	88
Affordability—The Road Ahead (Leon Reed)	40	Wartime Setting Marks Aldridge’s First Address to a DAU Graduating Class (Collie J. Johnson)	96
Conversations with the DACMs (Marcia Richard)	52		
Service Contract Management (Susan J. Harvey)	56		

### M A R C H — A P R I L

<i>Evolved Expendable Launch Vehicle System</i> (Col. R.K. Saxer, USAF • Lt. Col. J.M. Knauf, USAF • L.R. Drake • Dr. P.L. Portanova) .....	2	<i>Where Are All the Civilian "PMs in Waiting?"</i> (Arthur "Art" Santo-Donato) .....	68
<i>DAU Opens Its Doors in Huntsville, Ala.</i> (Sylvia Gasiorek-Nelson) .....	18	<i>Increasing Combat Effectiveness Through Interoperability</i> (Phuong Tran • Gordon Douglas) .....	78
<i>Implications of Commercial Product Insertion into the National Defense</i> (Tom Castino) .....	22	<i>Network-Centric Acquisition</i> (Dr. R.A. LeFande) .....	84
<i>Dr. Program Manager—Rx Program</i> (Daniel Knapp) .....	30	<i>Earned Value Management</i> (Quentin W. Fleming • Joel M. Koppelman) .....	90
<i>DAU Hosts WACUC Strategic Learning Symposium</i> (Sylvia Gasiorek-Nelson) .....	36	<i>From Now to the Objective Force</i> (Col. Theodore "Ted" Johnson, USA • Matt Gillis) .....	98
<i>Writing the Book on Getting SMART</i> (Dr. Mary-jo Hall • Cadet 1 <sup>st</sup> Class Isaac Bell, USAFA) .....	44	<i>"Breaking Down" The Work Breakdown Structure</i> (James J. Clark • Philip D. Littrell) .....	104
<i>Marine Corps Working to Equip Warfighters, Remove Roadblocks</i> (Col. Patrick J. Dulin, USMC) .....	50	<i>Transformation—DoD's Central Non-War Objective</i> (E. C. Aldridge, Jr.) .....	110
<i>"You Don't Need to Test COTS Components" and Other Myths</i> (Maj. Holly R. Mangum, USAF) .....	56	<i>Understanding the Program Manager's Role</i> (Lt. Cmdr. Jose Fernandez, USN • Armond Darrin) .....	114
<i>Welcome to a PMO for the 21<sup>st</sup> Century</i> (Maj. Michael "John" Smith, USAF) .....	60	<i>Air Force Center of Excellence</i> (Terry Little) .....	120
		<i>DAU Increasing Momentum Toward Strategic Partnerships</i> (Wayne Glass) .....	124

### M A Y — J U N E

<i>2002 Distance Learning Awards</i> (Christina Cavoli • Collie Johnson) .....	2	<i>Critical Success Factor (CSF) Analysis for DoD Risk Management</i> (Dr. James "Jim" Dobbins) .....	40
<i>e-Learning Magazine Names "Champions" of Distance Learning</i> (Christina Cavoli • Collie Johnson) .....	5	<i>Clinger-Cohen Act Compliance Policy</i> (E.C. Aldridge, Jr. • John P. Stenbit) .....	52
<i>Evolutionary Acquisition</i> (Alexander R. Slate) .....	6	<i>DAU Welcomes New Commandant</i> (Sylvia Gasiorek-Nelson) .....	54
<i>DAU Opens Mid-Atlantic Region in Patuxent River, Md.</i> (Sylvia Gasiorek-Nelson) .....	16	<i>The Value of Science and Technology</i> (Greg Mannix) .....	60
<i>DAU Strategic Partnerships Increasing Daily</i> (Annmarie Hart-Bookbinder) .....	22	<i>Commercial or Non-Developmental Item Acquisition Strategy</i> (Paul D. Gutierrez) .....	66
<i>Aldridge Publishes Definitions for Evolutionary Acquisition, Spiral Development</i> (E.C. Aldridge Jr.) .....	30	<i>Project Managers as Leaders</i> (Keith Lymore) .....	70
<i>Risk Data Based on Capability Maturity Models</i> (Lt. Col. Bob Lang, USAF) .....	32	<i>Risky Business</i> (Dr. Barry Boehm • Lt. Gen. Peter Kind, USA (Ret.) • Dr. Richard Turner) .....	74

<i>Mentor-Protegé Conference Setting for 2002 Nunn-Perry Awards</i> (Christina Cavoli) .....	81
<i>Innovation Through "Venture Capital" in DoD's Working Capital Fund</i> (WCF) Organizations (Mark Lewis) .....	86

<i>Opportunities for Working Capital Fund Organizations and Their Customers</i> (David A. Breslin) .....	96
--	----

## J U L Y — A U G U S T

<i>"Learn Space by Doing Space"</i> (Capt. John Martin, USAF • Lt. Col. Jerry Sellers, USAF • Lt. Col. Steve Green, USAF, Ret.) .....	2
<i>Only the Paranoid Survive</i> (Lt. Col. Scott E. Shifrin, USA • Anita Wood) .....	8
<i>SPS Users Meet for Second Joint Conference</i> (Linda Polonsky-Hillmer) .....	16
<i>USD(AT&amp;L) Media Roundtable</i> (E.C. Aldridge Jr.) .....	20
<i>Transitioning the Defense Acquisition Deskbook</i> (Sylvia Gasiorek-Nelson) .....	36
<i>Best Value Formula</i> (David P. Quinn) .....	40
<i>DAU Introduces Online International Acquisition Course</i> (Richard Kwatnoski) .....	46
<i>Non-Lethal Weapon Human Effects</i> (Susan D. Levine • Maj. Noel Montgomery, USAF) .....	50

<i>Reflections on Test and Evaluation (T&amp;E), Part I</i> (John F. Gehrig • Gary Holloway • George Schroeter) .....	56
<i>TSARC—The Test Schedule and Review Committee</i> (Lt. Col. Peter G. Laky, USA • Phillip H. Riley) .....	66
<i>Aldridge Publishes Policy Guidance on Acquisition of Services</i> (E.C. Aldridge Jr.) .....	71
<i>Use It or Lose It</i> (Mark Lewis) .....	72
<i>Leading Project Teams</i> (Owen Gadeken) .....	76
<i>AcqDemo—A Contribution-Based Pay System</i> (Marcia Richard) .....	82
<i>Human Systems Integration (HSI)</i> (James J. Clark • Robert K. Goulder) .....	88
<i>Transforming Acquisition and Logistics Support for the Warfighter</i> (Leon Reed) .....	94

## S E P T E M B E R — O C T O B E R

<i>The Joint CAD/PAD Program</i> (Dennis Chappell • Tony Taylor) .....	2
<i>DAU Conducts Last APMC Graduation</i> (Sylvia Gasiorek-Nelson) .....	10
<i>Sustainable Development on Federal Facilities</i> (Rand H. Fishbein, Ph.D.) .....	16
<i>DAU Exports PMT-352 to South Region</i> (Collie J. Johnson) .....	24
<i>Reflections on Test and Evaluation, Part II</i> (John F. Gehrig • Frederick D. Mabanta) .....	32
<i>DAU and SOLE Sign Memorandum of Understanding</i> (Dr. Russell A. Vacante) .....	43
<i>Achieving Defense Transformation</i> (Louis A. Kratz • Randy T. Fowler • Jerry D. Cothran) .....	48
<i>DAU Hosts Third Annual Business Managers' Conference</i> (Joni Forman) .....	56
<i>Promoting Transformation with Ideas from the Acquisition Workforce</i> (Steven J. Manchester) .....	73

<i>DAU Hosts 9/11 First Responder</i> (Sylvia Gasiorek-Nelson) .....	76
<i>DAU Hosts Fourth DoD Chancellor's Conference</i> (Christina Cavoli) .....	80
<i>Assessing the Transition-to-Production Risk</i> (Tamara J. Adams • Steve P. Austin • Robin B. Soprano • Lucinda Matkin Stiene) .....	90
<i>Quantity Discounts/Economic Order Quantity</i> (Michael Bogner • Chuck Wong • Bernie Price) .....	96
<i>New Online Tool Gives SPS Users Help When They Need It</i> (Linda Polonsky-Hillmer) .....	99
<i>DAU's Systems Engineering Department Revamping SYS-301 Course</i> (Dr. Martin Falk) .....	100
<i>Aldridge Publishes Policy on Continuous Learning</i> (E.C. Aldridge Jr.) .....	113
<i>Contract Performance Information System</i> (Alan Gilbert Markell) .....	114

## N O V E M B E R — D E C E M B E R

<i>Releasing the Power of Innovation in Acquisition Management</i> (Barbara Rostosky Brygider) .....	2
<i>DAU Sets Industry Standards as Best in Class Corporate University</i> (Paul T. McMahon) .....	6
<i>DAU Launches New Online Modules</i> (Sylvia Gasiorek-Nelson) .....	8
<i>Technical Performance Measurement—A Program Manager's Barometer</i> (Mike Ferraro) .....	14
<i>Making the Acquisition Warrior Fully Mission Capable</i> (Col. Donald J. "Bud" Vazquez, USAF (Ret.) • Capt. Brian C. Payne, USAF) .....	22

<i>Organization of the Joint Technology Office</i> (Lt. Col. John B. Wissler, USAF) .....	26
<i>Affordability Through Commonality</i> (Capt. Herb Hause, USN • Chris Grassano) .....	32
<i>Activity Based Costing Efforts</i> (Stephen J. Moretto) .....	36
<i>The Socratic Method</i> (Maj. Norman H. Patnode, USAF) .....	48
<i>The Trouble with Action Items</i> (Don Paul Rance • Capt. Dan Ward, USAF) .....	56
<i>Building Communities of Practice</i> (David P. Brown) .....	60

# Defense Threat Reduction Agency Supports DAU Coursework

## WMD Simulation Incorporated into DoD Advanced Systems Engineering Course

BUD BLUM • JON NEASHAM • BILL MAGILL • RANDY ZITTEL

**B**eginning this fiscal year, the Defense Threat Reduction Agency (DTRA) began a new era of cooperation within the DoD professional education community. DTRA is now partnering with the Defense Acquisition University (DAU) to introduce senior DoD technical managers to DTRA Modeling and Simulation (M&S) capabilities as part of a formal, ongoing course presented at the Capital and Northeast Region, located at Ft. Belvoir, Va.

The Capital and Northeast Region is a campus of the Defense Acquisition University (DAU), a corporate university aligned under the Director, Defense Procurement and Acquisition Policy, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L). This course is routinely offered six times a year in the Washington metropolitan area and 50 times across the country.

The Under Secretary of Defense (AT&L) and the military services have increased their emphasis on the use of simulation in support of DoD acquisition activities. In support of these goals, DAU offers a four-hour simulation block in its senior Advanced Systems Planning, Research, Development, and Engineering Course for the DoD (AT&L) workforce.

Because of this increased emphasis on using simulation in support of DoD acquisition activities, DTRA's Weapons of



Donald Warf (2<sup>nd</sup> from right), and Edward Pelczar (2<sup>nd</sup> from left), Cubic Applications, Inc., demonstrate WALT/IMPACT simulation to DAU students.

Mass Destruction (WMD) Assessment and Analysis Branch expressed an interest in supporting the four-hour session. To this end, DTRA collaborated with Professor Randy Zittel, DAU Technology and Engineering Department, who is also the author for much of DAU's M&S curriculum.

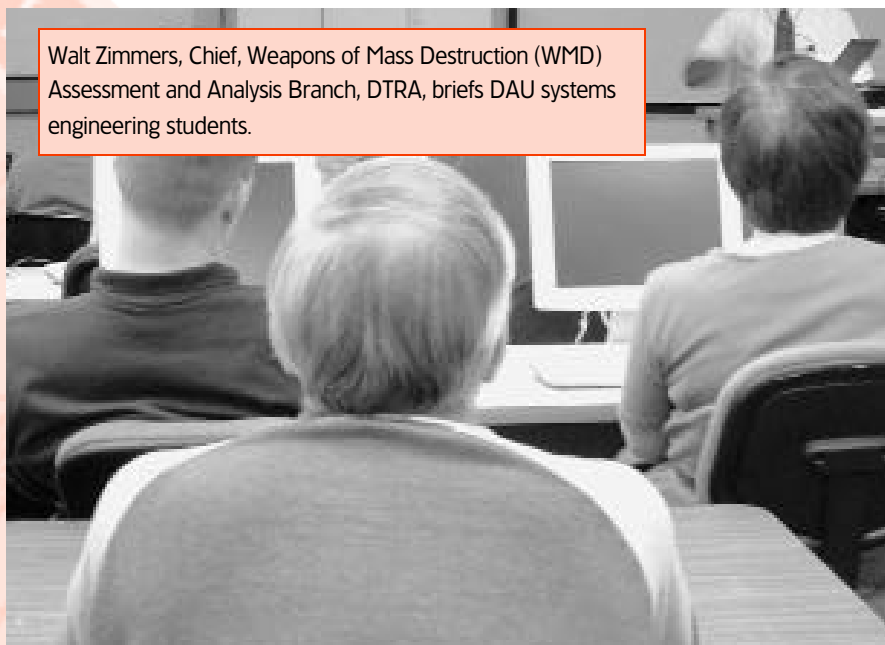
"Hands-on exposure to current simulation technology," Zittel stated, "goes far beyond what any in-classroom discussion can accomplish by allowing senior technical managers—who may not be currently involved in state-of-the-art

techniques and practices within the systems planning, research, development and engineering career field—access to simulation experts. Such exposure also helps validate the value of simulations being used in so many DoD applications."

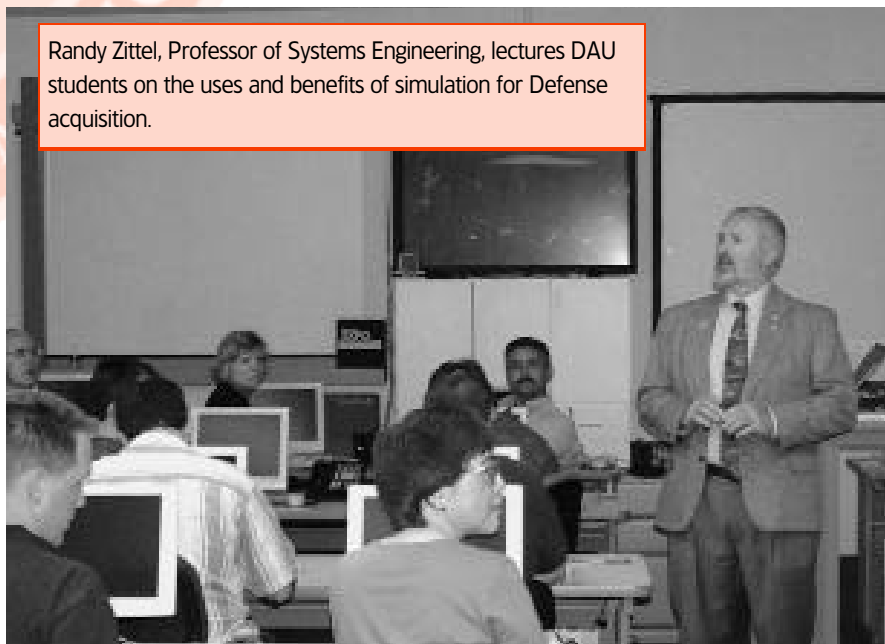
On Oct. 3, 2002, 38 students—predominantly federal civilians, GS-14 and above, and military officers, major (O-4) and above—attended the first DTRA session. The four-hour session took place in the Technical Engineering Support Center at the DTRA Telegraph Road site

**Blum** is a Technical Specialist, Cubic Applications Inc. (CAI), Alexandria, Va. **Neasham** is Director of the East Coast Engineering Division, CAI, Alexandria, Va. **Magill** is a Program Manager, Weapons Effects High Level Architecture Conformation, CAI, Alexandria, Va. **Zittel** is a Professor of Systems Engineering, Technology and Engineering Department, Defense Acquisition University Capital and Northeast Region, Fort Belvoir, Va.

Walt Zimmers, Chief, Weapons of Mass Destruction (WMD) Assessment and Analysis Branch, DTRA, briefs DAU systems engineering students.



Randy Zittel, Professor of Systems Engineering, lectures DAU students on the uses and benefits of simulation for Defense acquisition.



in Alexandria, Va. Two hours of lecture by Zittel followed a welcome and introductory overview by Walt Zimmers, Chief of the WMD Assessment and Analysis Center.

During his presentation, Zimmers provided an introduction to DTRA M&S capabilities and plans; insight into the uses of M&S throughout the DoD; and cooperative M&S activities with other agencies and activities such as support for Homeland Defense.

Following Zittel's lecture, the class was divided into groups and given demon-

strations of DTRA's simulation Research and Development (R&D) resources at the adjacent R&D facility. The East Coast Engineering Division of Cubic Applications, Inc., operates the facility for DTRA and also hosts some of the agency's premier M&S development capabilities.

Engineers from Cubic Applications Inc., demonstrated ongoing DTRA M&S projects, supporting DoD simulations, engineering tools, and the development environment and platforms.

Students observed a demonstration of the Weapons Analysis and Lethality Tool

Set/Integrated Modeling Platform for Advanced Computational Technologies (WALTS/IMPACT), conducted by Cubic engineers Donald Warf and Edward Pelczar. WALTS/IMPACT is an ongoing DTRA effort that integrates physics-based weapons effects with environmental data to show realistic battle-damage outcomes to the warfighter.

The demonstrations highlighted current efforts aimed at improving DTRA's ability to rapidly construct target environments for its M&S programs. David Holland, also of Cubic, presented the Constructive Rapid Assessment Modeling tool used for rapid target generation.

Cubic's Mike Walsh showed students how terrain databases were integrated into the modeling effort; Rob Eddy, also of Cubic, covered the uses of Computer Assisted Design tools to build realistic targets. Cubic engineer Cecil Maccannon Jr. provided additional insight and answered questions raised during the tours.

An aspect of the facility that is critical to interactive simulation development is the incorporation of other military simulations. Cubic's Conan Smith demonstrated the Simulation Training and Analysis for Fixed Facilities/Sites (STAFFS)—a simulation developed by the Air Force Research Laboratory. The STAFFS model is used with DTRA models to assess fixed-site performance under chemical and biological warfare conditions.

After the demonstrations, students returned to the classroom for additional presentations and a wrap-up period. According to Zittel, he received "overwhelming feedback on how great the information was" and how helpful it was to see the simulations "operate live" in the first session. Five additional demonstrations are scheduled through August 2003.

Editor's Note: The authors welcome questions or comments on this article. Contact them at [jneasham@cubic.com](mailto:jneasham@cubic.com); [wmagill@cubic.com](mailto:wmagill@cubic.com); and [randy.zittel@dau.mil](mailto:randy.zittel@dau.mil).



# “Itinerant” Painter Adds 18<sup>th</sup> Century Charm to DAU Cafeteria

**Greg Caruth**

**E**xuberant and vivacious muralist Virginia Jacobs McLaughlin entertained the lunch crowd in the DAU Cafeteria during January 2003 as she created a colonial-style mural around the walls right before their eyes. The mural is similar to murals she painted in dining rooms throughout the Mount Vernon Inn a few years ago.

The old cafeteria look will not be missed. After over 20 years of extremely bland appearance (decorated with chrome chairs and posters from the 1972 Munich Olympics), the DAU cafeteria received a major facelift in 1999 with the addition of Windsor chairs and tavern tables, a colonial motif, and a new name—“George's Cafe,” after George Washington. The new mural is a final touch to create a comfortable colonial atmosphere that well reflects local history. Besides Mount Vernon with its Stone Mill and 16-Sided Barn, other sites she has included are Gunston Hall, Woodlawn Mansion, Belvoir Mansion, and Olde Towne Alexandria. The new mural should last for decades and age as gracefully as its painter has.

Her painting style is full of personality, and incorporates the primitive styles of Moses Eaton and Rufus Porter, and includes hints of the famous French scenic wallpapers by Zuber et Cie, created from woodblocks and still being made today. She is also adept at Chinese-style painting known as “Chinoiserie” from the 18<sup>th</sup> century.

A spry 80 years young, Virginia has been painting murals for the last 50 years and a lot can be said for the advantages of experience. She paints boldly and directly on the wall with little or no preliminary drawing. She consults photos and drawings from many sources, but as she explains, the finished wall is sketched in her mind before she starts painting.

She still carries her own ladders and mixes her own latex colors; however, one of her two sons, Mark “Salyer” McLaughlin, an artist in his own right, paints the highest parts of the sky and blocks in large areas to speed progress. Mark is well-known nationally in his own right as a faux-finish painter, capable of imitating any texture including wood grain, marble, and stone.

Her current home in Frederick, Md., reflects her driving need to create and paint, and she seems to paint any object that does not move. Her dining room walls are painted with all the

historic sites in the Frederick area. Virginia attended Stephens College and the University of Missouri, then could not find a teaching job. In her early thirties she began painting large murals. With her late husband Donald, a former CIA agent and later real estate agent, she bought and restored an 1850s manor house in Carroll Valley, Pa. She started painting woodwork, walls, and furniture in the “old style” as part of the renovation. She is also an expert stenciler. Besides the Mount Vernon Inn at Mount Vernon, home of George Washington, she has also decorated the Brafferton Inn and Grand Army of the Republic (GAR) Building in Gettysburg, Pa.; the Fairfield Inn in Fairfield, Pa.; and a number of private residences. She has been featured in publications including *Country Kitchens*, *Country Living*, *Americana*, and the *Washington Post* “Home” section.

Unlike itinerant painters in the 18<sup>th</sup> century, Virginia signs and dates her murals. As she said in an ABC “Working Woman” special, she's proud of what she does and wants to be remembered for it. But anyone who has met her and seen her work will not forget her. She's as charming as she is talented.

Editor's Note: Caruth is Director, Visual Arts and Press, Operations Group, Defense Acquisition University, Fort Belvoir, Va.

Virginia Jacobs McLaughlin paints a colonial-style mural around the walls of the DAU Cafeteria, at Fort Belvoir, Va. A spry 80 years young, Virginia has been painting murals for the last 50 years and now resides in Frederick, Md.

Photo by Army Sgt. Kevin Moses



## Pentagon Outlines Missile Defense Program

SGT. 1<sup>ST</sup> CLASS DOUG SAMPLE, USA

**W**ASHINGTON, Dec. 17, 2002—Despite a few misfires and a ground-based booster system that's back on the drawing board, the head of the U.S. Missile Defense Agency says he is confident the system "will work."

It has to.

The United States currently has no overall proven defense capability against an enemy ballistic missile attack. In light of threats by hostile states and terrorist groups, however, President Bush directed the Pentagon today to begin fielding initial defense capabilities by the year 2004. He cited the need "to protect U.S. national security and the security of its allies and friendly countries."

A special commission in 2001 assessing the ballistic missile threat to the United States listed China, India, North Korea, Pakistan, Russia, Iraq, and Iran as countries that have or have been working to develop ballistic missiles.

At a briefing today, Air Force Lt. Gen. Ronald Kadish said he is confident the United States is ready to proceed with initial testing of what is called "hit-to-kill" capability. Kadish is the Director of the Missile Defense Agency, the organization responsible for research, development, and testing of all the components of the program.

"What we do know is that our fundamental technology of hit-to-kill works. A few years ago, I could not tell you that with confidence," Kadish said.

"The system testing that we have done gives us the confidence that we have the ability to integrate these elements, as complex as they are, and to make them effective," he said. "Our computer predictions... are telling us when we do have a successful test, it occurs just as we predicted."

Kadish has good reason to be confident—and videotape to back the Missile Defense Agency test results. During tests in 2001 and 2002, the agency was able to destroy four of five missiles in long-range, ground-based intercepts, two of four using the Army's Patriot Advanced Capability-3 missile system, and three of three short- to medium-range missiles using ship-based intercepts.

"Some things will work and some things won't, but we will build confidence over time as we invest in this program," he said. That investment is expected to cost about \$8 billion a year, and Kadish said he will ask Congress to appropriate another \$1.5 billion over the next two years for certain development capabilities. These include:

- Up to 20 ground-based interceptor missiles capable of taking out ICBMs [Intercontinental Ballistic Missiles] during mid-flight—16 at Fort Greeley, Alaska, and four at Vandenberg Air Force Base, Calif.
- Up to 20 sea-based interceptor missiles employed on existing Aegis destroyers.
- Deployment of air-transportable Patriot PAC-3s to intercept short- and medium-range ballistic missiles.
- Land-, sea- and space-based sensors.
- Upgrades to existing early-warning satellites and radars in the United Kingdom and Greenland.
- Development of a sea-based X-band radar and upgrades to sensors currently on Aegis cruisers and destroyers.

Kadish described the missile defense program as aggressive and ongoing. He said that results of recent testing and analysis have given his agency the confidence to move forward.

Editor's Note: This information is in the public domain at: <http://www.defenselink.mil/news>.

# DAU Collaborates with NASA

## Sharing Stories with Like-Minded Leaders in Program and Project Management

TODD POST

**T**erry Little has plenty of stories to tell—and well he should. During his sterling career as a civilian program manager in the Air Force, he has learned a lot about managing large missile programs; and, like any true leader, wants to share some of that with the people who can benefit from it most. That's why we publish him regularly in *ASK Magazine*, a National Aeronautics and Space Administration (NASA) publication about program and project management.

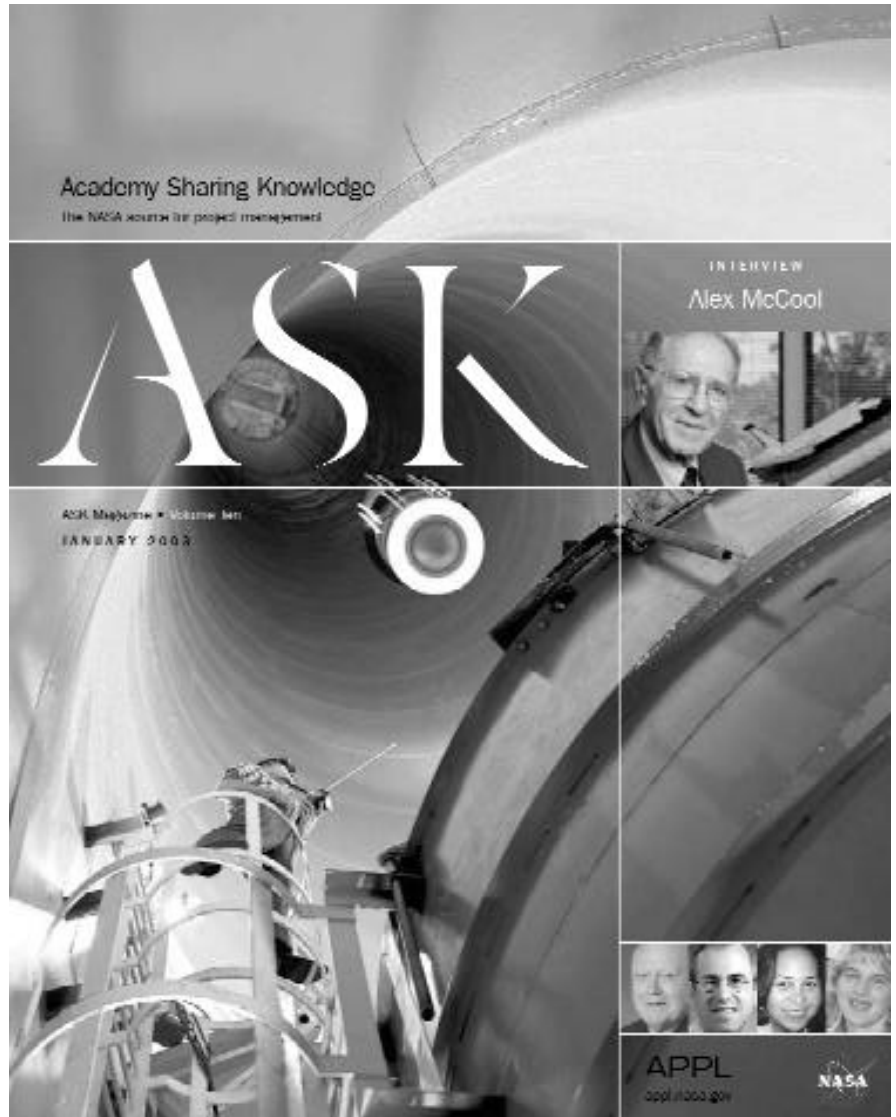
That's right, NASA, the space people—but don't think for a moment this magazine is meant for just NASA. In each issue we feature project leaders from industry and other government agencies. ASK content is mostly about managing large complex projects, usually about technology doing some amazing thing, and that general purpose objective is why we've sought out contributions from people like Terry Little.

### Thanks to DAU

As the ASK editor, I feel compelled to say thank you to the Defense Acquisition University (DAU). Nowhere have we gotten as much high-quality material outside of our NASA sources as from our friends at DAU. Terry Little is just one of those with a DAU affiliation.

Many at DAU know about ASK, but not all, I suspect. So, if you are unfamiliar with ASK, or would like to understand how this relationship developed, let me tell you about it. Here is the ASK story.

*Post is the Editor of ASK Magazine and works for EduTech Ltd. In Silver Spring, Md. In April 2003, he will be speaking about ASK Magazine and the NASA Knowledge Sharing Initiative at an E-Gov Conference in Washington, D.C.*



### The Roots of ASK

ASK is published bimonthly by NASA's Academy of Program and Project Leadership (APPL) as part of its Knowledge Sharing Initiative (KSI). I'm involved in other parts of KSI—more on KSI later—although my primary responsibility is to edit *ASK Magazine*. I collect stories from the best program and project managers around, and from any practitioner

who has knowledge to share and an inclination to tell a story. ASK content is generally in the form of stories told by program and project managers describing their own experiences. Surely, anybody who's been managing long enough has stories to tell.

APPL Program Director Dr. Edward J. Hoffman has always believed that NASA



program and project managers are best served by knowing how projects are managed elsewhere. How do peers in other places deal with large budgets, lengthy schedules, and complicated organizations among other things?

Terry Little was an obvious choice when we were looking for contributors outside of NASA. Besides his remarkable accomplishments as a manager, Little is known for his plain-spoken candor, and this fit the tone Hoffman and ASK Editor-in-Chief Dr. Alexander Laufer wanted to set with ASK. Little accepted their invitation to provide a story for the first issue of ASK in January 2001. Since then, he has had a story in every issue.

Little was hardly an unknown quantity when he was invited to write for ASK. Hoffman and Laufer had worked with him before. *ASK Magazine* is an offshoot of a project they had begun in the late '90s, culminating in their book, *Project Management Success Stories: Lessons of Project Leadership* (Wiley, 2000). Using the same model as ASK, they collected stories from a variety of project leaders in government and private industry. In all, they collected 70 stories by 36 different project managers, including Little.

### Stories as Teaching Tools

Why a story? To put it bluntly, the best project managers manage from the gut; they know what to do to drive a project toward success not because of what they've read in a management text, but what they know works based on years of experience, nurtured over a career of ups and downs, successes and failures, trial and error.

How does one convey this kind of knowledge to a peer or junior colleague? Reach for formulas or the latest theories and the words seem incompatible with the meaning of the experience. But start telling a story—let me tell you about what happened to me—and if the listeners have been anywhere near that kind of experience before, they will recognize the terrain and identify with the meaning on a tacit level.

...The best project managers manage from the gut; they know what to do to drive a project toward success not because of what they've read in a management text, but what they know works based on years of experience, nurtured over a career of ups and downs, successes and failures, trial and error.

In *Project Management Success Stories*, Hoffman and Laufer began with one basic premise. Practitioners themselves are generally the most qualified teachers of other practitioners, and the best way for practitioners to learn from one another is by listening to them describe shared types of experiences.

A significant body of scholarship supports the use of stories as a way to convey lessons learned. Using stories in this way was not new when Hoffman and Laufer began in *Project Management Success Stories*, but no management book before this had used storytelling so deliberately to examine the nuances of project management.

Laufer, in particular, has been challenging the status quo of what makes a successful project manager for many years before he began work on *Project Management Success Stories*. In his book, *Simultaneous Management* (Wiley, 1997), he began collecting stories to support his findings that the best project managers know more than they can tell using the formal vocabulary of scholarship. In many cases, the best way for them to make manifest their knowledge is to simply start describing their experiences.

### The NASA Knowledge Sharing Initiative

What is unique about the NASA Knowledge Sharing Initiative is that it has “prod-

ucts” that give structure and create an impetus for a project management storytelling community to grow up around. KSI combines three main products: Masters Forums, *ASK Magazine*, and Transfer of Wisdom Workshops.

Masters Forums, held semi-annually, bring together between 40 and 50 of the best project managers from NASA, private industry, and other government agencies for three days of knowledge sharing, mostly in the form of stories. The idea of getting leaders together to talk about lessons learned in the form of stories is a novel approach, and it sure beats a PowerPoint presentation—just ask anyone who's been to a Masters Forum.

In NASA, the popularity of the Masters Forums is due in large part to how they bridge the knowledge gap between NASA Centers. NASA has nine centers around the United States. Although there is much collaboration and teaming among the centers, it is not inconceivable that project managers at Goddard Space Flight Center, for example, might know little more about Ames Research Center in California than where it is located on the map. In that way, the Masters Forums—and the Knowledge Sharing Initiative in general—are advancing the NASA Administrator's mission of a “One NASA.”

*ASK Magazine*, short for Academy Sharing Knowledge, captures and crafts the stories from the Masters Forums. Because ASK is published online and in print, it can share the stories with a much larger audience than 40 or 50 who attend the Masters Forums. Not all the stories appearing in ASK derive from the Masters Forums, but once a story is shared at the Forum and discussed by participants it has already begun being readied for publication.

All federal agencies face the grim prospects of a knowledge drain. In the last several years, many agencies have attempted multiple initiatives to capture the knowledge of their senior leaders. ASK is one such solution that seems to be striking a chord with people at NASA.



In January 2001, ASK was launched, and has repeatedly been hailed as one of the most innovative initiatives in the government to capture the knowledge of senior practitioners before they retire. The print version of *ASK Magazine* now reaches an audience of nearly 5,000.

Transfer of Wisdom Workshops, conducted at NASA Centers, use stories published in *ASK Magazine* as starting points for the workshop participants to share knowledge and discuss project issues, culminating with their telling stories of their own.

### How Knowledge is Transferred

In an upcoming issue of *ASK Magazine*, Roy Malone, a NASA project manager from Marshall Space Flight Center, tells a story about attending a Masters Forum and getting ideas from Air Force Program Director Judy Stokley, who was invited as the keynote speaker. The point of the story that Malone fixed on was how Stokley addressed a painful government-mandated drawdown plan in the mid '90s and devised some ingenious ways of minimizing the impact on the people she had to let go. Facing a mandated drawdown of his own at Marshall, Malone reflected on what he heard and adapted Stokley's ideas to his situation at Marshall.

"What inspired me about this was that she took a 'humanitarian' approach. She partnered with the contractor to figure out how to minimize the impact on people. She didn't release them all at once, for example, but gave them time to find other jobs. She talked about how she met with all the employees in an open forum and answered questions about why this was happening and what was going on. The thing that struck me was she got personally involved... In Judy's case, it was apparent that the government cared about what happened to the people who would lose their jobs."

—Roy Malone, "Thank you, Judy"  
*ASK Magazine*, Issue 11

In the same issue, we feature a story by Stokley that gives readers some context

for her own transformation as a leader. At the Defense Systems Management College (DSMC) in the early '90s, she found a course on leadership that utterly transformed the way she thought about herself as a manager.

"In the early '90s, I took some courses at the Defense Systems Management College. One teacher there taught a course in Human Relationships, or something like that, and it changed my life. The course was about leadership and how to communicate with the people on your team... Since 1992, I have read a roomful of books on psychology, people, and leadership; before 1992 I hadn't read one. I said to myself, 'My God, there's a whole reservoir of knowledge out there that I didn't know to tap'... I always tease the people down at DSMC that they really created me. I became a different person after going there, but not for the reasons they might think—not because I went to all their management classes, but because they launched me on a new path to understanding the meaning of leadership."

—Judy Stokley, "My Schooling in Leadership," *ASK Magazine*, Issue 11

"Thank you, Judy," the story by Malone that we published in ASK, demonstrates the impact of storytelling as a force multiplier in terms of knowledge sharing. At the Masters Forum, Stokley's story began a chain reaction. Since then we've published the Malone story in ASK, recycling the knowledge for 5,000 readers to ponder how or whether to use for themselves.

"Thank you, Judy" is also an important story because it shows the breadth of the APPL Knowledge Sharing Initiative. That a NASA project manager learns something from an Air Force Program Director at the Masters Forum highlights how the initiative facilitates knowledge sharing not only across NASA but across government agencies.

### New Collaborations with DAU

Hoffman, Laufer, and I are now working on a book that examines four projects—two from NASA and two from

the Air Force. Once again, we have invited our friends Terry Little and Judy Stokley to participate. We know that DAU has produced two excellent case studies about Little's Joint Air to Surface Standoff Missile (JASSM) and Stokley's Advanced Medium-Range Air-To-Air Missile (AMRAAM) programs, but our approach using stories is going to be entirely different.

Only stories, we believe, are sufficiently nuanced to convey the complexity of projects this size. We are collecting stories by multiple parties who were involved in the program. No case study that we know of has examined a project using stories told by several people involved.

We chose these programs because of our existing relationships with Little and Stokley, and because we knew that these programs are superb examples of two managers at the top of their game, operating "outside the box." When we asked Little and Stokley to participate, they said, "Sure, sounds like a great idea." They have helped us by setting up meetings with key personnel on the project, providing an entrée for us to interview the prime contractors and their suppliers. This typifies the kind of relationship we've developed with them.

The Knowledge Sharing Initiative truly appreciates all the support we've gotten from our friends at DAU. In addition to Little and Stokley, Owen Gadeken is on our Review Board and has contributed stories to ASK; Norman Patnode has a story appearing in an upcoming issue of ASK. We thought it was about time we said thanks, and the best place to say that publicly was in your own excellent publication, *Program Manager*.

Where else but here to share some knowledge with you?

Editor's Note: Post welcomes questions, comments, or contributions to *ASK Magazine*. Contact him at [tpost@edutechltd.com](mailto:tpost@edutechltd.com).

# Tough Questions

Terry Little

**D**riving back to my hotel, I felt exhausted. I had just spent four days at the Defense Systems Management College, meeting with 12 small groups of program management students from all Services to discuss a case study they had just completed. I was there to give the students a chance to ask questions that they felt the case study had not answered.

While I drove I found myself wondering why I had dedicated so much time and energy to this work. It wasn't as if I had no idea what I was getting into. I had been doing this three times a year for the past three years. And it sure wasn't because I had nothing else to do. I was managing one of the Air Force's largest and most important programs. That by itself was more than a full-time job.

Nor was it because I liked to hear myself talk. An introvert by nature, I don't fashion myself a professional educator. Nor did I expect some tangible reward or recognition. I knew that I was as high in the pecking order as I was ever going to get and while the school appreciated my service, I am not sure my boss would be happy if he realized how much time I was spending at this.

So why was it worth it?

I thought back on the day. Many of the questions were ones that I had heard over and over. For these I had stock answers; however, in almost every section I got a few new questions that really forced me to reflect. "What were you

thinking when you...?" "Why did you make the choice to...?" "Did you consider...?" "If you had it to do over again would you still...?"

As I thought about my answers, I soon realized that these students were teaching me to think about things I had never thought of before. They were enriching my experience in a way that I could have never anticipated. It was a richness I was convinced made me better in the job I was doing.

I also thought about the students and reflected on my experience there as a student almost 10 years ago. I had left the school with my head crammed with facts, but with none of the practical knowledge or insights to understand what the day-to-day life of a project manager was really like.

In my training there had been no opportunity to interact with real practitioners—no opportunity to hear real firsthand anecdotes or war stories that would take me beyond the theory. What are the tough decisions? What is most important when everything seems important? How do you deal with risk and adversity? What's the role of intuition, values, and judgment in the decision process? How do you deal with dysfunctional teaming relationships? How do you handle higher-ups when they demand that you do something you think is unwise? How do you recover after a mistake?

I felt like these students, partly as a result of my having shared my time with them and given candid



Terry Little, Director, Kinetic Energy Interceptor Program, Missile Defense Agency, speaking at the Defense Acquisition University, October 2001.

answers to their questions, would have a much better understanding and ability to deal with these sorts of real-world issues than I had when I left school. Hopefully, they will not have to learn as many things the hard way as I did. Hopefully, they will understand that the most difficult issues they face rarely have a pat answer.

As I continued toward the hotel, I began to feel exhilarated even. These students and their eagerness to learn, their zest to grow as professionals, had recharged my old batteries—cracked through some of my cynicism and made me feel more vital than ever. What I had done was the right thing for the students, for the Department, and for me.

Was it worth it? Absolutely!! I had struck a blow for progress.

# Micromanagement Reduction Plan

## How to Deal With Micromanagers in Seven Easy Steps

CAPT. DAN WARD, USAF

**N**obody likes to be micromanaged, and yet many people don't know what to do about it. The truth is that people who are being micromanaged can actually do quite a lot to improve their situations. Here are seven ideas to consider:

### 1. STEP INTO THE FRAY.

Accomplishment speaks for itself. A lack of trust is often the foundation of micromanagement; it is much easier for bosses to trust people who perform well.

### 2. SOMETIMES, IT IS BETTER TO ASK FOR FORGIVENESS THAN PERMISSION.

When bosses exhibit a micromanagement style, don't be an enabler. Make decisions and take the initiative to do things, rather than waiting for guidance from above or asking for approval at each step. But, the key word here is "sometimes." Remember, the boss is still the boss.

### 3. KEEP BOSSES INFORMED AND HELP THEM "LOOK SMART."

Micromanagers always want to know what is happening, so make sure you provide a dependable, accurate source of information. Regular, concise reports of progress and events, both positive and negative, will help scratch the micromanagement itch and give bosses a real sense of involvement.

### 4. RUN INTERFERENCE.

Help keep bosses out of the weeds, protect their time, and redirect things when necessary. Make sure everyone knows that bosses do not need to see everything—that's why they have staffs. Don't cut bosses out of the loop (see No. 3), but don't put them in every loop.

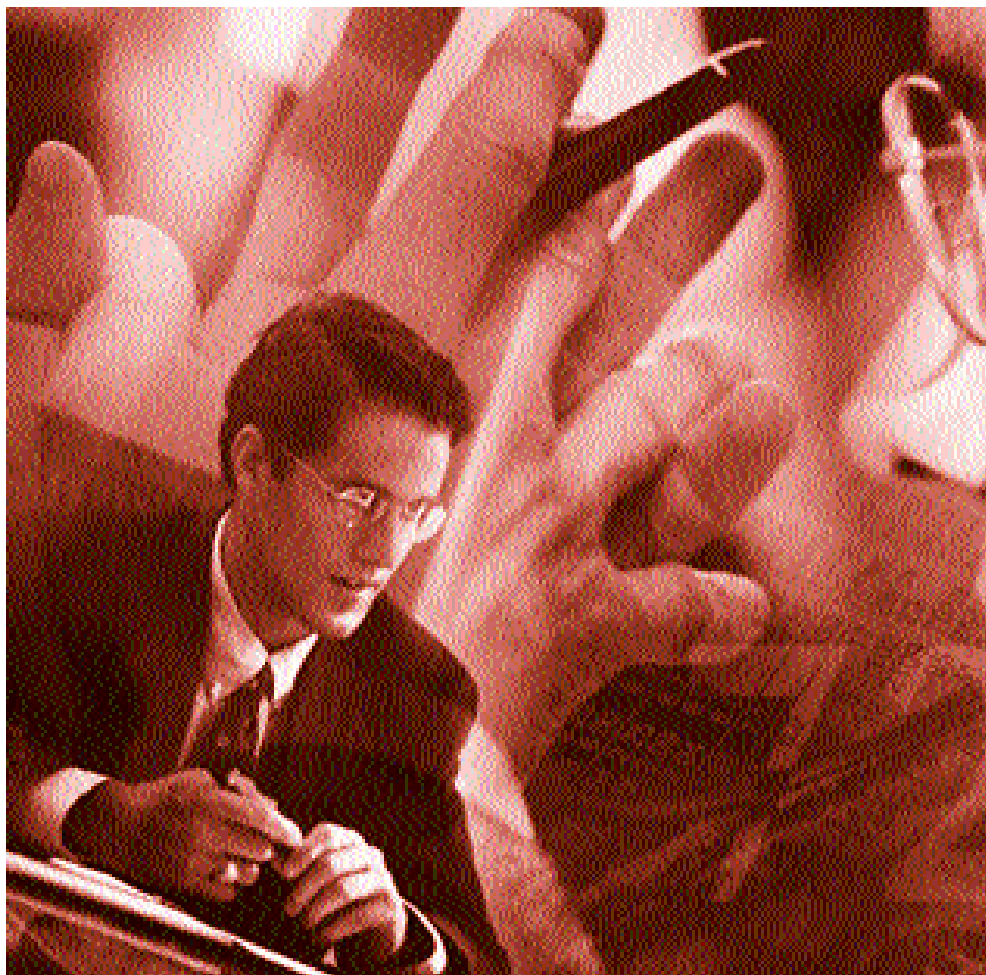
### 5. SPEAK UP AND VOLUNTEER.

Don't be bashful; plug yourself into the process where it's appropriate. For example, should your bosses ask for a two-hour briefing, volunteer to hear it your-

self and then later summarize it for them. Ask if there is anything on their *To Do* list that you can handle for them. They may say no, but it doesn't hurt to offer.

### 6. BRING ASSESSMENTS AND RECOMMENDATIONS, NOT JUST PROBLEMS AND OPTIONS.

When something needs management attention, don't let bosses start from scratch. Do your homework (and some of theirs) before it reaches their desks. When bosses ask for options, don't just



*Ward is the Contracting Officer's Technical Representative (COTR) for the BRITE Tactical Imagery Dissemination System at National Imagery and Mapping Agency, Reston, Va. He is Level I-certified in Test and Evaluation and in Program Management, and Level III-certified in Systems Planning, Research, Development, and Engineering.*

pass those options along without comment. Make recommendations based on your honest analysis and give supporting facts.

#### 7. BE HONEST AND FRANK.

Tell your bosses what you want to do and how you want to do it. Ask for more latitude and less upper-level involvement. Let bosses know when their assistance is or is not needed.

#### The Bottom Line

Firm proactivity is our best hope to minimize micromanagement. Silent complicity just perpetuates it. It may seem easier to go with the flow, but in the long run, failing to take action is going to hurt a lot more than speaking up. We need to do what bosses ask of us, but we also need to help them ask for the right things.

Editor's Note: The author welcomes questions and comments on this article. Contact Ward at [WardD@nima.mil](mailto:WardD@nima.mil).



**Firm proactivity is our best hope to minimize micromanagement. Silent complicity just perpetuates it. It may seem easier to go with the flow, but in the long run, failing to take action is going to hurt a lot more than speaking up.**

## STATEMENT REQUIRED BY THE ACT OF AUG. 12, 1970 SECTION 3685, TITLE 39, U.S.C. SHOWING OWNERSHIP, MANAGEMENT, AND CIRCULATION

*Program Manager* is published bimonthly at the Defense Acquisition University (DAU), Fort Belvoir, Va. 22060-5565. The University publishes six issues annually. The Director of the DAU Press is Greg Caruth; the Managing Editor is Collie Johnson; and the publisher is the Defense Acquisition University. All are collocated at the following address:

**DEFENSE ACQUISITION UNIVERSITY  
ATTN DAU PRESS  
9820 BELVOIR RD STE 3  
FT BELVOIR VA 22060-5565**

### Average Number of Copies of Each Issue During the Preceding 12 Months

A. Total number of copies printed (net press run) .....	21,566
B. Paid and/or requested circulation:	
1. Sales through dealers and carriers, street vendors, and counter sales .....	0
2. Mail subscriptions paid and/or requested .....	20,415
C. Total paid and/or requested circulation .....	20,415
D. Free distribution by mail, carrier, or other means; samples, complimentary, and other free copies .....	1,100
E. Total distribution .....	21,515
F. Copies not distributed:	
1. Office use, leftover, unaccounted, spoiled after printing .....	51
2. Returns from news agents .....	0
G. Total distribution .....	21,566

### Actual Number of Copies of a Single Issue Published Nearest to Filing Date

A. Total number of copies printed (net press run) .....	21,904
B. Paid and/or requested circulation:	
1. Sales through dealers and carriers, street vendors, and counter sales .....	0
2. Mail subscriptions paid and/or requested .....	20,753
C. Total paid and/or requested circulation .....	20,753
D. Free distribution by mail, carrier, or other means; samples, complimentary, and other free copies .....	1,100
E. Total distribution .....	21,853
F. Copies not distributed:	
1. Office use, leftover, unaccounted, spoiled after printing .....	51
2. Returns from news agents .....	0
G. Total distribution .....	21,904



# Four Defense Leaders Answer Questions in Pentagon Forum

KATHLEEN T. RHEM

**W**ASHINGTON, Dec. 18, 2002—Four of the Defense Department's top leaders took to the microphone today to explain to a Pentagon audience exactly what they do.

The Under Secretaries of Defense each spoke briefly and answered questions from Pentagon employees. Edward C. "Pete" Aldridge, Under Secretary for Acquisition, Technology and Logistics, said a priority of his was to get away from using the term "acquisition reform."

"I didn't really like that word, 'reform,'" he said. "It sounded like I'd done something bad and I must repent, or I'd been to reform school." Instead, Aldridge said, he's pushed the men and women in his Department to focus on acquisition excellence—"doing things right, doing them quickly, doing them with skill and precision."

Under Secretary for Policy Douglas Feith spoke to the group on how the Defense Department is working through historic times. "History doesn't hand out great, terrible, or important events evenly over the years. There are times when world affairs are fairly steady, when America's relationships are stable and proceeding predictably down a fixed track," he said. "And then there are times like ours."

Feith said the world and America's place in it have been in flux since the Sept. 11, 2001, terrorist attacks. He explained the policy section tries to make sense of unexpected events and shape DoD's reactions and responses to those events.

He described the policy section as hundreds of thoughtful men and women who are "frequently accused of being brainy." He said these men and women work "extraordinary hours ... with short deadlines and high demands."

Still, he said, they're motivated and "fired up by the knowledge that their work, when it's smart enough

and creative, and timely enough, has a good chance of becoming U.S. policy."

Dov Zakheim, DoD Comptroller and Chief Financial Officer, told the group that the money in the Defense Department budget is taxpayers' money "and we take that very seriously." He described his team's job as "trying to get the right money into the right hands."

Under Secretary for Personnel and Readiness David S.C. Chu, described his team as "the people people." He said the value of DoD personnel was apparent at the Pentagon on Sept. 12, 2001, "when the work force marched back in ... when the building was still literally on fire."

He said it's also been apparent in "the intrepid action of our forces in Afghanistan" and in the positive response of thousands of Reserve Component troops who responded to call-ups after Sept. 11 without a complaint.

"They have met that call with great spirit," Chu said of the Reserve Component forces.

Questions from the audience ranged in topic from integration of reserve forces to abuses of the government travel card program. Other topics included the aging federal civilian work force and the role of the Defense Policy Board.

Ken Krieg, Special Assistant to the Defense Secretary, wrapped the forum up by lauding the work the men and women of the Defense Department have accomplished over the past year.

"Thanks for what you do to help defend America and its interests," he said. "Have a safe and happy holiday season."

Editor's Note: This information is in the public domain at <http://www.defenselink.mil/news>.

## DAU SOUTH REGION FEATURED IN AL&T MAGAZINE

**T**he Defense Acquisition University South Region (DAU South) Headquarters, located in Huntsville, Ala., is featured in the Army's March 2003 issue of *Acquisition, Logistics & Technology (AL&T) Magazine*. The article includes a number of photos, including the opening of the region, and three Memorandum of Understanding (MOU) signings: with the University of Alabama-Huntsville/DAU on June 14, 2002; with Army Tactical Missiles on Aug. 22, 2002; and with Anniston Army Depot on Aug. 20, 2002. View the article after publication at <https://aim.rdaisa.army.mil/alt/home.cfm>.

Other MOUs signed by DAU South include the U.S. Army Space and Missile Defense Command on July 24, 2002; the Aviation and Missile Command (AMCOM) on June 10, 2002; the Program Executive Office (PEO) Aviation on April 17, 2002; the Targets Management Office, U.S. Army Simulation, Training, and Instrumentation Command (STRICOM) on July 31, 2002; the U.S. Army Defense Ammunition Center on Oct. 24, 2002; and the Historically Black Colleges and Universities/Minority Institution Research

Alliance (HMIRA) Project Office on Jan. 16, 2003 (see p. 82, this issue). Two additional MOUs and five letters of intent were signed at DAU-South's First Annual Acquisition, Technology, and Education Exposition on Jan. 28, 2003.

In fiscal 2003, the South campus is projected to teach 5,600 students using 50 professors and 10 support personnel. In early December 2002, DAU South was notified that the Southern Region passed accreditation by the Council on Occupational Education. Accreditation and partnering with local Universities like the University of Alabama-Huntsville and Jackson State have increased training for acquisition careerists and their progress toward degree completion and Defense Acquisition Workforce Improvement Act (DAWIA) certification.

DAU South is located in Building 7, 6767 Old Madison Pike, Huntsville, Ala. Visit the DAU Web site at <http://www.dau.mil> for a complete listing of all classes, course schedules, directions to campus, and academic and vocational credit equivalencies.

## DAU ADDS NEW R-TOC MODULE TO CONTINUOUS LEARNING CENTER WEB SITE

**T**he DAU Continuous Learning Center (CLC) is pleased to announce the availability of a new CLC Module: *Introduction to Reducing Total Ownership Costs*.

Introduction to Reducing Total Ownership Costs (R-TOC) is a three-hour module offered to the DoD Acquisition, Technology and Logistics (AT&L) workforce in order to share R-TOC ideas, tools, and strategies with the acquisition and logistics communities. The module provides an orientation to the R-TOC requirement, definitions of key R-TOC concepts, and descriptions of best practices. It emphasizes total cost of ownership reduction from a systems perspective.

All DoD AT&L personnel who need to apply R-TOC principles or who desire to further their working knowledge of the R-TOC process and concepts should complete this module. Participants are expected to have a variety of career experiences. This course is especially recommended for indi-

viduals working in program/project management organizations.

The average cumulative time for module completion is three seat hours. You may take this self-paced module over time, with the ability to return to the last page you accessed. The module includes periodic review questions and a post-test.

The post-test requires a minimum score of 70 percent and may be taken as many times as necessary to obtain a passing score. A certificate of completion is available at the conclusion of a successful post-test. Upon earning the certificate, it is available anytime in each student's personal online transcript. Student transcripts are found in the Administration Building/Student Records/Student Transcripts. Select the module title hyperlink to obtain the certificate.

This course is available on <http://clc.dau.mil>; select the Learning Center, select Course Information and Access, and then select the course title.

# '04 Budget Request First to Incorporate Bush Priorities

JIM GARAMONE

**W**ASHINGTON, Feb. 5, 2003—The fiscal 2004 defense budget request is the first to incorporate the Bush administration's new defense strategies and priorities, Defense Secretary Donald H. Rumsfeld told the House Armed Services Committee today.

The budget, presented in a time of war, attempts to balance between near-term and long-term risks. The request is \$379.9 billion for fiscal 2004.

The Secretary said the United States must accomplish three challenges at once: successfully fight the global war on terror; prepare for near-term threats by making long-delayed investments in readiness, people, and modernization; and prepare for the future by transforming for the 21st century.

"The 2004 budget request before you today is designed to help us do all three," he told the representatives.

The Secretary said the strategy, and therefore the budget, derives from the Quadrennial Defense Review. In that document, planners identified six goals the military must meet to transform:

- The military must be able to defend the U.S. homeland and bases of operation overseas.
- The military must be able to project and sustain forces in distant theaters.
- The military must be able to deny enemies sanctuary.
- The Department must improve U.S. space capabilities and maintain unhindered access to space.
- The military must harness U.S. advantages in information technology to link up different kinds of U.S. forces, so they can fight jointly.
- Finally, the military must be able to protect U.S. information networks from attack—and to disable the information networks of adversaries.

In fiscal 2004, Rumsfeld said, over \$24 billion will go specifically to programs that strengthen all of these transformational goals. Procurement funding in the Department's Future Years Defense Plan increases by 30 percent and research and development funds, by 65 percent.

Rumsfeld said that to prepare for the threats the United States will face later in this decade, the 2004 budget requests increased investments in a number of

critical areas. "Over the next six years, the president requested a 15 percent increase in military personnel accounts, above the 2002 baseline budget," he said. "That's an increase in funding for family housing by 10 percent over the same period."

Over the next six years, the budget forecasts a 20 percent increase for operations and maintenance accounts above the 2002 baseline budget. "We have added \$40 billion for readiness of all the Services and \$6 billion for facilities sustainment over the same period," he said. "These investments should help us put a stop to the past practice of raiding the investment accounts to pay the immediate operations and maintenance needs."

The 2004 budget request does not include funds for operations in the global war on terror. "Last year, we requested, but Congress did not approve, the \$10 billion we knew we would need for the first few months of this fiscal year to fight the global war on terror," he said. Because DoD does not have that money, it has paid for the war every month since October 2002 by borrowing from other programs.

"We're robbing Peter to pay Paul," Rumsfeld said. "And that does not include the costs of preparations for a possible contingency in Iraq and the cost of the force flows that have taken place thus far. This pattern is fundamentally harmful to our ability to manage the Department."

Even with a \$15.3 billion increase in the defense budget request, some hard choices had to be made, Rumsfeld said. Navy shipbuilding, while up to seven vessels, is not at the number Rumsfeld would like to see. The same is true for science and technology accounts. Rumsfeld said the ideal percentage of the DoD budget spent on science and technology should be 3 percent. The percentage in the request is 2.69 percent.

The Services also canceled programs that don't fit into the new strategy, and plan to retire older ships and aircraft early. These decisions could save about \$80 billion over the Future Years Defense Program—money that could be applied to other, more pressing, needs.

Editor's Note: This information is in the public domain at <http://www.defenselink.mil/news>.



# Acquisition Chief Discusses Transformation

CHUCK PAONE

**H**anscom Air Force Base, Mass. (AFPN)—Communication and creativity are the key to transforming the defense acquisition process, the Air Force's top acquisition official said during a visit here Dec. 3.

The status quo is unacceptable, said Dr. Marvin Sambur, Assistant Secretary of the Air Force for Acquisition, because acquisition cycle times—the time it takes to go from concept development to initial operational capability—are much too long.

“On average, Air Force programs' cycle times run about 10 years, and that's only the average; some programs take up to 25 years to get to the field,” he said.

The F/A-22 Raptor, which was conceived in 1981 and will not achieve initial operational capability until 2005 or 2006, is an example, he said. He contrasted this to the automobile industry, which has cut its cycle times to just a couple of years.

Besides the basic problem of not getting the capability to operators quickly enough, too many other problems are created when programs get stretched out, Sambur said. For one thing, it becomes very hard to keep up with technological changes.

“When it takes so long, it just can't be state-of-the-art,” he said.

There are also political implications.

“When leadership changes several times during the time it takes to field a system, the program gets opened up to increased scrutiny, and it gets threatened,” he said. This often leads to more problems for the program, further lengthening the schedule, and causing more budget overruns.

This negative cycle can then cause problems for other “healthy” programs, from which funds are often siphoned to cover the shortfalls, he said.

While there are many tools program managers can use to help avoid or at least reduce these problems, there is one thing that is essential in every case.

“Collaboration is the answer,” Sambur said, stressing that constant communication among all the parties involved in a program is what ultimately makes the difference between successful and problem-plagued programs.

“Have you ever noticed how much faster we're able to deliver things when we're at war, how we're able to deliver in months what might otherwise take us 10 years?” Sambur asked. “What do you think the difference is? It's that everyone's talking to one another all the time.”

Reducing burdensome regulations and affording managers greater autonomy are crucial in improving the acquisition process, Sambur said.

Leaders have to make sure creative program managers are not unnecessarily penalized for taking chances that ultimately do not work, and reward people for taking chances that do pay off.

“You've got to let program managers manage,” he said.

“Command, control and intelligence, surveillance and reconnaissance integration is perhaps the most significant of all [Department of Defense] transformation goals,” Sambur said. “It's absolutely paramount.”

This is true not only Air Force-wide but also across the Services, he said.

Editor's Note: This information is in the public domain at <http://www.af.mil/news>.



# JOIN DAUAA!

## ATTENTION

### Defense Acquisition University Graduates, Faculty, and Staff!

**T**he name of the Defense Systems Management College Alumni Association—DSMCAA—has changed to recognize DAU-DSMC organizational realignments and provide for a broader-based, more inclusive membership. The name is now Defense Acquisition University Alumni Association (DAUAA). The DAUAA Web site URL and e-mail address have also changed:

Web Site: <http://www.dauaa.org>  
E-mail: [dauaa@erols.com](mailto:dauaa@erols.com).

If you do not yet belong to DAUAA, take advantage now of the great benefits of membership. As a graduate of any DAU-DSMC course, you are eligible to join a select group of acquisition workforce professionals and receive DAUAA benefits. Your benefits as a DAUAA member, to name a few, include:

- Addition of DAUAA membership to your résumé.
- Continuing involvement in defense acquisition activities and links to other professional organizations.
- Networking with other members of the Defense acquisition community through the Association membership Web site at <http://www.dauaa.org>.
- Timely updates on evolving Defense acquisition policies in Association Newsletters.
- Forum on initiating input to Defense acquisition matters through Newsletter and Symposium papers.
- Continuing Learning Points (CLP) for DAUAA Annual Symposium participation—up to 16

CLPs—toward meeting DoD continuing education requirements.

- Promoting DAU's reputation as a world-class acquisition learning center, thereby enhancing value of education and training received.

Join this select group of professionals who are proud of their achievements as DAU-DSMC graduates, thankful for the skills and expertise they possess, and ready to make additional contributions to the security and progress of our nation.

Take advantage of this opportunity to help yourself and others. Call (703) 960-6802 to join DAUAA or complete one of the forms (opposite page). Mail it to the address shown. To learn more about DAUAA or register online using a credit card, visit the DAUAA Web site at

<http://www.dauaa.org>.



# THE RULES HAVE CHANGED!

## DAU Alumni Association News!

### All DAU Course Graduates Gain Full Membership Status!

Industry & Government Employees Who Are *Not* DAU-DSMC Graduates  
Are Eligible for *Associate* Membership!



**GIVE A COPY OF THIS OFFER TO AN ASSOCIATE**

# THE RULES HAVE CHANGED!

## DAU Alumni Association News!

### All DAU Course Graduates Gain Full Membership Status!

Industry & Government Employees Who Are *Not* DAU-DSMC Graduates  
Are Eligible for *Associate* Membership!



# THE RULES HAVE CHANGED!

## DAU Alumni Association News!

### All DAU Course Graduates Gain Full Membership Status!

Industry & Government Employees Who Are *Not* DAU-DSMC Graduates  
Are Eligible for *Associate* Membership!



**GIVE A COPY OF THIS OFFER TO AN ASSOCIATE**

# THE RULES HAVE CHANGED!

**You have a new chance to join the DAU Alumni Association!**

**All course graduates gain full membership status!**

The benefits of DAUAA membership have increased. Graduates of all DAU courses are now eligible for full membership status. Industry and government employees who are not DAU-DSMC graduates are eligible for associate membership. Take advantage of this opportunity to join DAUAA today!



☐ 1 yr \$25<sup>00</sup> ☐ 3 yr \$60<sup>00</sup>

**Fill out this card and mail with a check payable to DAUAA. Mail to:**

DAU ALUMNI ASSOCIATION  
2550 HUNTINGTON AVE STE 202  
ALEXANDRIA VA 22307  
Register Online at: <http://www.dauaa.org>

Name .....

Address .....

Rank/Title/Service.....

Company/Agency.....

Phone (H).....

(W).....Fax .....

**For information call (703) 960-6802 • (800) 755-8805 • Fax: (703) 960-6807 • E-mail [dauaa@erols.com](mailto:dauaa@erols.com)**

**You have a new chance to join the DAU Alumni Association!**

**All course graduates gain full membership status!**

The benefits of DAUAA membership have increased. Graduates of all DAU courses are now eligible for full membership status. Industry and government employees who are not DAU-DSMC graduates are eligible for associate membership. Take advantage of this opportunity to join DAUAA today!



☐ 1 yr \$25<sup>00</sup> ☐ 3 yr \$60<sup>00</sup>

**Fill out this card and mail with a check payable to DAUAA. Mail to:**

DAU ALUMNI ASSOCIATION  
2550 HUNTINGTON AVE STE 202  
ALEXANDRIA VA 22307  
Register Online at: <http://www.dauaa.org>

Name .....

Address .....

Rank/Title/Service.....

Company/Agency.....

Phone (H).....

(W).....Fax .....

**For information call (703) 960-6802 • (800) 755-8805 • Fax: (703) 960-6807 • E-mail [dauaa@erols.com](mailto:dauaa@erols.com)**

**You have a new chance to join the DAU Alumni Association!**

**All course graduates gain full membership status!**

The benefits of DAUAA membership have increased. Graduates of all DAU courses are now eligible for full membership status. Industry and government employees who are not DAU-DSMC graduates are eligible for associate membership. Take advantage of this opportunity to join DAUAA today!



☐ 1 yr \$25<sup>00</sup> ☐ 3 yr \$60<sup>00</sup>

**Fill out this card and mail with a check payable to DAUAA. Mail to:**

DAU ALUMNI ASSOCIATION  
2550 HUNTINGTON AVE STE 202  
ALEXANDRIA VA 22307  
Register Online at: <http://www.dauaa.org>

Name .....

Address .....

Rank/Title/Service.....

Company/Agency.....

Phone (H).....

(W).....Fax .....

**For information call (703) 960-6802 • (800) 755-8805 • Fax: (703) 960-6807 • E-mail [dauaa@erols.com](mailto:dauaa@erols.com)**



## The acquisition ladder is a tough climb without the right education...DAU.

**W**hen was the last time you or one of your associates attended one of the 85 different acquisition courses offered by the Defense Acquisition University at one of its 12 locations around the country?

Did you know industry personnel may also attend?

Are you current on the DoD 5000-series cancellations and revisions? Do you know the latest acronyms and terms?

When was the last time you or your associates took an introductory, intermediate, or advanced course in acquisition, technology and logistics?

Did you know that DAU now offers 18 certification courses that are taught entirely or in part using distance learning? Or check out one of the 35 self-paced learning modules now on our Continuous Learning Center Web site ([http://clc.dau.mil/kc/no\\_login/portal.asp?st~redirect=LC\\_CIA](http://clc.dau.mil/kc/no_login/portal.asp?st~redirect=LC_CIA)).

We also offer fee-for-service consulting and research programs. And take advantage of our competitively priced conference facilities.

Maybe it's time to talk to your training officer about some additional training opportunities. Or call the DAU Registrar at 1-888-284-4906 to see how we can structure an educational program just for you.

Visit the DAU Web site for the DAU 2003 Catalog and other publications at <http://www.dau.mil>. To apply for all DAU classes in the catalog, including Distance Learning classes, go to <http://www.dau.mil> and visit the DAU Course Schedule. To apply for a course, click on the "Enroll Here" link found in the DAU Home Page banner.





# NAVY DACM RETIRES

**W**illiam H. "Bill" Hauenstein retired from federal service effective Dec. 31, 2002. Hauenstein became the Navy's first Director of Acquisition Career Management (DACM) in November 1991, where he served for over 11 years as the Department of the Navy's authoritative expert on acquisition workforce issues, reporting directly to the Assistant Secretary of the Navy (Research, Development and Acquisition). As a member of the Senior Executive Service, he provided advice and staff assistance directly to the Assistant Secretary on all matters.

Starting from a non-existent career management program where Navy's acquisition professionals had not yet met newly established training, education, or experience requirements, Hauenstein initiated an aggressive plan of action to establish a professional career development program. From that "zero baseline" in 1991, his achievements were significant.

In fiscal 2002, he was successful in obtaining \$1.8 million for tuition assistance, specifically earmarked for the Navy's professional acquisition workforce. As a result, acquisition training and education was made available to over 15,000 personnel through enrollment at DAU. He also sponsored three Distance Learning master's degree programs through the Naval Postgraduate School.

Under the Navy's Continuous Learning (CL) program, he sponsored career conferences for the Engineering and Contracting Communities, and other specialized conferences for the Small Business and Logistics communities. In fiscal 2002, the Navy's CL program provided training to over 7,000 workforce members.

In April 1997, Hauenstein took on the added responsibility of Acting Navy Chair, Defense Systems Management College Executive Institute—a position he held until March



Deputy Executive Director, DAU Curricula Development Support Center Robert Ainsley (right) presents a plaque to retiring Navy Defense Acquisition Career Manager William H. Hauenstein on Dec. 19, 2002, in recognition of his many years of support and service to the mission of the Defense Acquisition University. Hauenstein, who served as the Navy DACM for over 11 years, retired from the federal civilian service effective Dec. 31, 2002.

2000. A retired Navy Rear Admiral with more than 30 years of active duty, Hauenstein served in numerous critical acquisition-related assignments at the Aviation Supply Office in Philadelphia, Pa.; the Naval Supply Center Puget Sound, Wash.; and the Contract Administration Services Office, Bridgeport, Conn., where he commanded 190 military and civilian employees and administered in excess of \$600 million in defense contracts.

At the headquarters level, Hauenstein was extensively involved in contracting for major systems and the formulation of procurement policy. His assignments included: Director of the Naval Material Command Acquisition Policy and Plans Division; Director of the Assistant Secretary of the Navy (Shipbuilding and Logistics)

Acquisition and Contract Policy Office; Deputy Commander for Contracts, Naval Sea Systems Command; the Competition Advocate General of the Navy; and Deputy to the Assistant Secretary of the Navy (Research, Development and Acquisition) for Acquisition Policy, Integrity, and Accountability.

Hauenstein received a master's in Procurement (with distinction) from the Graduate School of Business Administration at the University of Michigan (Ann Arbor) in 1968. During his career as a Naval Officer, he earned numerous personal awards including the Secretary of Defense Superior Management Award in recognition of his efforts in planning and implementing Congressional, Department of Defense, and Department of Navy initiatives in fiscal 1984. He is a member of Beta Gamma Sigma, an honorary business fraternity, and Phi Gamma Delta.

Christine E. Stelloh-Garner, Department of the Navy Acquisition Reform Executive and Defense Acquisition University Functional Advisor, becomes the new Navy DACM.

# Navy Appoints New Director, Acquisition Career Management

**C**hristine Stelloh-Garner assumed duties as the Director, Acquisition Career Management, Office of the Assistant Secretary of the Navy (Research, Development & Acquisition) in January 2003, reporting directly to the Navy Acquisition Executive. She is responsible for ensuring that Navy and Marine Corps acquisition workforce members have education, training, and experience to meet congressionally mandated Defense Acquisition Workforce Improvement Act requirements.

Stelloh-Garner was born at the Millington Naval Air Station in Memphis, Tenn., and spent her youth in the United States and Japan before joining the Naval Air Systems Command as a clerk-typist in 1974.

As an upward mobility program trainee, she transitioned to program and management analysis, serving in positions involving various facets of program and facility management. Assignments included the Joint Service, Tilt-Rotor V-22 Deputy for Program Appraisal, and Program Manager for both Caribbean Regional Operations Center Upgrade and, later, the AH-1 Night Targeting System. Additionally, she served on the Command Federal Women's Program Committee.

Briefly leaving the Naval Air Systems Command in the mid-1980s, Stelloh-Garner remained active in naval aviation as a Booz-Allen & Hamilton consultant at the Naval Aviation Depot in Cherry Point, N.C., and as family readiness advisor for Marine Medium Lift Helicopter Squadron (HMM) 264. She also represented Advanced Technology, Inc., as a program consultant for naval aviation.

Stelloh-Garner joined the staff of the Program Executive Officer (PEO) for Tactical Aircraft Programs as a Deputy for Acquisition before being selected to the Senior Executive Service and assuming responsibility as Deputy PEO for Air Anti-Submarine Warfare (ASW), Assault and Special Mission Programs in March 1998. As the Deputy



PEO, she provided oversight and insight for over 100 efforts from the following program teams with an annual appropriation of approximately \$4 billion: Air ASW Maritime Surveillance Aircraft (P-3, S-3, EP-3, ES-3, VPU); Multi-mission Helicopters (MH-60, SH-60, HH-60), MH-53, Air ASW Sensors and Sonobuoys; Marine assault aircraft (AV-8, AH-1, UH-1, CH-53, V-22); and special mission Executive Helicopters (VH-3, VH-60), T-45 Training System, and E-6 Airborne Command Post.

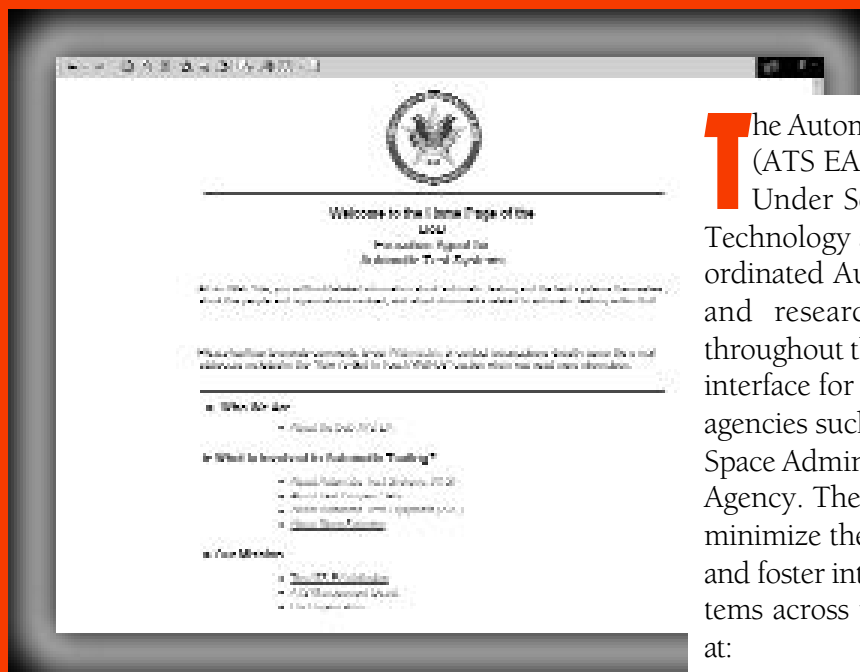
Selected as the Department of Navy's Acquisition Reform Executive in May 2001, Stelloh-Garner was the facilitator and catalyst for innovation, stream-

lining, and change across all acquisition processes of the Navy and Marine Corps. She also served as the Department's Standardization Executive. In November 2002, Stelloh-Garner became the Director for Program Analysis and Support in the newly formed office of the Deputy Assistant Secretary of the Navy for Acquisition Management before assuming her current responsibilities.

As a collateral duty from early 2000 until January 2003, Stelloh-Garner served as the Defense Acquisition Management Functional Advisor. In this capacity, she led a team of representatives across the Department of Defense in establishing requirements and providing recommendations to the Under Secretary of Defense (Acquisition, Technology & Logistics) concerning certification requirements and fulfillment of more than 10,000 Department of Defense acquisition workforce members in the Program Management career field.

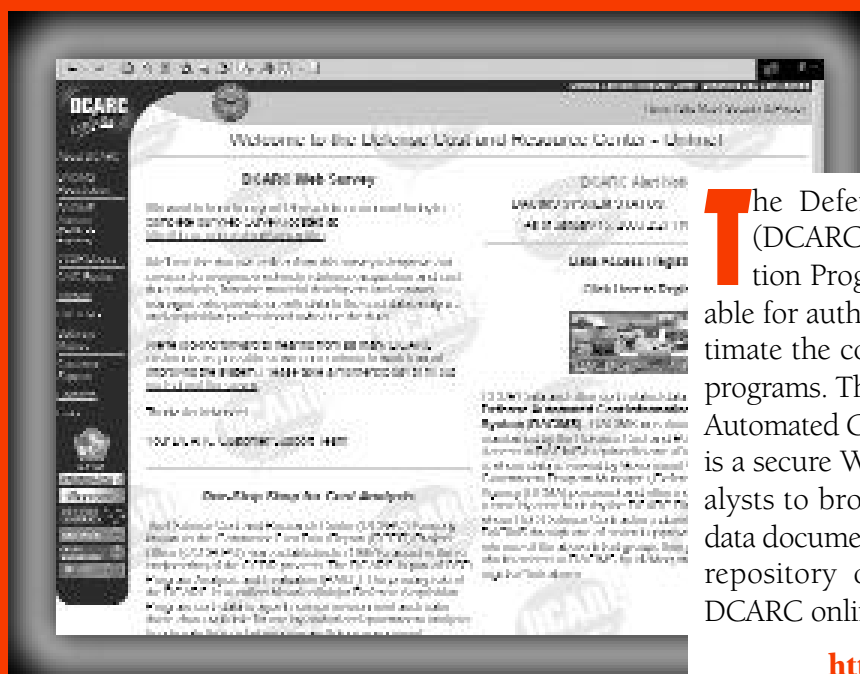
A graduate of the Defense Systems Management College Program Management Course, Stelloh-Garner also holds a Bachelor of Arts in Business Administration from Mount Vernon College. An amateur garden designer, she and her husband, Robert Garner, enjoy their southern Maryland oasis.

## Two New Web Sites Introduced on AcqWeb



**T**he Automatic Test Systems Executive Agent (ATS EA) is chartered by the Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) to implement a coordinated Automatic Test Systems acquisition and research and development program throughout the Department, and to serve as the interface for DoD with other departments and agencies such as the National Aeronautics and Space Administration and the Federal Aviation Agency. The major goals of the ATS EA are to minimize the cost of automatic testing to DoD and foster interoperability of automatic test systems across the Services. Visit ATS EA online at:

<http://www.acq.osd.mil/ats/>



**T**he Defense Cost and Resource Center (DCARC) collects Major Defense Acquisition Program cost data and makes it available for authorized government analysts to estimate the cost of ongoing and future defense programs. The DCARC's revolutionary Defense Automated Cost Information System (DACIMS) is a secure Web site that allows DoD Cost Analysts to browse through almost 50,000 cost data documents via the Internet. It is the largest repository of DoD cost information. Visit DCARC online at:

<http://dcarc.pae.osd.mil>

# **FORCE PROJECTION SYMPOSIUM IV**

**May 6-8, 2003**

**Sponsored by  
PEO CS&CSS - PM Force Projection  
National Defense Industrial Association**



**Sheraton Tacoma  
1320 Broadway Plaza  
Tacoma, WA 98402  
(253) 591-4142 or (800) 845-9466**

**For Symposium Information:  
[FPSymposium@mlndspring.com](mailto:FPSymposium@mlndspring.com)  
[www.peocscss.tacom.army.millpmfp](http://www.peocscss.tacom.army.millpmfp)**



# DAU Hosts WACUC Strategic Learning Symposium

## Building Bridges—Pursuing Partnerships

SYLWIA GASIOREK-NELSON

**R**epresentatives of government and industry corporate universities from across the nation gathered together at the Defense Acquisition University (DAU) on Nov. 7, 2002, to participate in the Washington Area Corporate University Consortium (WACUC) Strategic Learning Symposium.

Hosted at DAU's main campus at Fort Belvoir, Va., the 2002 WACUC Symposium emphasized the importance of partnerships—sharing ideas, sharing knowledge, and learning from other's experiences in meeting the needs of the continuous learning workforce. Several dynamic presentations, workshop sessions, and panels as well as exhibits from industry and government reinforced the symposium theme of "Performance Improvement Through Strategic Partnering"

Welcoming the participants was Dr. Toni Ungaretti, member of the WACUC Board of Directors and Assistant Dean and Director of the Division of Undergraduate Studies in the School of Professional Studies in Business and Education, Johns Hopkins University.

"We have come together to look at learning, to develop partnerships, to learn from each other, and to work together to make corporate universities a wonderful moving force for higher education," she said.

She also expressed gratitude to all who participated in making the 2002 event a resounding success.



Dr. Toni Ungaretti, member of the WACUC Board of Directors and Assistant Dean and Director of the Division of Undergraduate Studies in the School of Professional Studies in Business and Education, Johns Hopkins University.

"We, at WACUC, are very excited to have this opportunity to be here at DAU's beautiful facilities. We're delighted with our host and we are absolutely grateful to all who worked tirelessly to make sure that this event happened."

### Opening Remarks

Frank J. Anderson, Jr., President, DAU, and member of the WACUC Board of Directors, welcomed all the symposium participants to the DAU Fort Belvoir campus. He described the day's events as not only a great opportunity to team, but also to get to meet a lot of other dy-

namic organizations in the learning business, to share, and to grow together.

Anderson's presentation focused on the training transformation process that DoD and DAU are currently undergoing.

"It will give you a context—why what we do is so important for our organization and for our nation," he said. "It will also provide perspectives on the training transformation from our senior leaders."

Two years ago, Anderson explained, DAU started a huge undertaking to transform its way of training the DoD

*Gasiorek-Nelson is a full-time contract editor for Program Manager Magazine.*

AT&L workforce—a community of about 140,000 people.

“We are a critical part of growth in our economy—the growth of people in the workforce,” he said, “and our challenge is to figure out how to prepare people to excel tomorrow.”

Anderson also emphasized that any transformation initiative or major initiative requires a significant amount of

## THE WACUC SYMPOSIUM WORKSHOPS

- Standards of Certification, Dr. Louise Wehrle, Director of Certification, National Contract Management Association
- Systems Dynamic Modeling for Workforce Planning, Dr. Michael Cassidy, Professor, Marymount University
- Community of Practice, John Hickock, Knowledge Management Officer, Defense Acquisition University
- Performance Measures/Outcomes, James Royalty, Training Manager, DynCorp



Frank J. Anderson Jr., DAU President

communication and partnership, and partnerships like WACUC are the best way to share best practices, borrow ideas and concepts, share experiences, and build relationships to face the future together.

### **Culture— The Key to Effective Partnerships**

Dr. Thomas Sawner, Chief Executive Officer, River Oaks Associates, delivered an informative and motivational keynote address entitled, “Culture: The Key to Effective Partnerships.”

Sawner, who has an extensive background in leader-

ship development, executive coaching, organizational change, strategic planning, and adult learning, focused on the importance of organizational culture as a key factor for success or failure and addressed the following topics:

- Five key cultural values that define the “Leadership Envelope” and how to intuitively assess the five values for your team.

- How the “Leadership Envelope” defines the bounds within which a team leader must operate to be successful.
- How an awareness of differing team cultures can smooth the path for a successful alliance or partnering opportunity.
- How the five cultural sub-scales can be used to predict organizational performance and how to focus perfor-

## THE WACUC SYMPOSIUM EXHIBITORS

Aristotle Central/Human Resources Consultants  
Aglar Systems  
Averett University  
BottomLine Solutions, Inc.  
Business Management Research Associates, Inc.  
BRTRC  
Corporate University Enterprise, Inc.  
Defense Acquisition University  
Enterprise Management Ltd.  
ESI International  
Frank Associates, Inc  
The Government Affairs Institute at  
Georgetown University  
The Graduate School, USDA  
GW Solutions  
IMCA Socrates™  
Johns Hopkins University  
Knowlysis L.L.C.  
Management Concepts  
Marymount University  
Meridian Knowledge Solutions, Inc.  
Northern Virginia Community College  
SkillSoft  
Strayer University  
University of Phoenix, Northern Virginia Campus

## Meeting the Needs of the Con



Dr. Michael Cassidy, Marymount University:  
"Systems Dynamic Modeling for Workforce  
Planning."

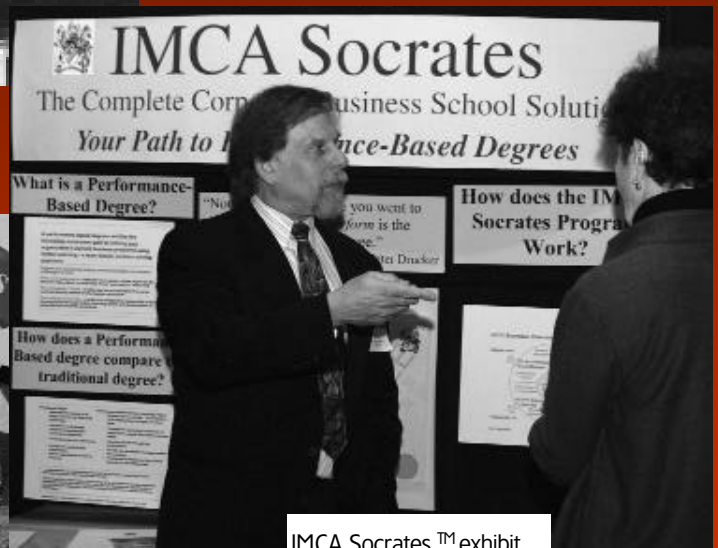


Corporate University Enterprise, Inc., exhibit.

Dr. Thomas Sawner, River  
Oaks Associates; "Culture:  
The Key to Effective Partner-  
ships."



Frank Associates, Inc., exhibit.



IMCA Socrates™ exhibit.

# M P O S I U M

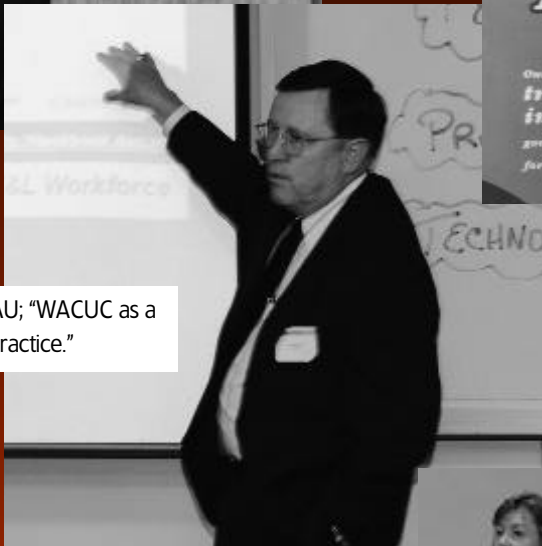
## tinuous Learning Workforce



Chris St. John, DAU; e-Learning Panel.



Graduate School, USDA exhibit.



John Hickok, DAU; "WACUC as a Community of Practice."



BTRC exhibit.



Dr. Louise Wehrle, National Contract Management Association; Standards Certification Workshop.



mance improvement by knowing an organization's cultural scale values.

### About WACUC

The Washington Area Corporate University Consortium (WACUC) is a forum for collaboration and partnership among governments, businesses, and higher education organizations in the greater Washington, D.C. region. The group is comprised of representatives affiliated with workplace learning and corporate universities. One of the growing trends in workplace learning is the incorporation of college credit programs into training initiatives. WACUC provides a platform for discussion in ways to integrate accredited courses into job-specific learning.

WACUC allows members the opportunity to come together, to talk to each other, to get to know each other, and to make sure that each of the member organizations is the best at providing high-quality education. The Consortium is also an excellent forum for members to really think about how to expand corporate value through learning.

## THE WACUC SYMPOSIUM PANELS

### Partnership Panel

- Dr. Toni Ungaretti, Assistant Dean and Director of the Division of Undergraduate Studies, Johns Hopkins University
- Carl Zaiss, Author, *True Partnership-Revolutionary Thinking About Relating to Others*

### e-Learning Panel

- Frank J. Anderson, Jr., President, DAU
- Christopher St. John, Distributed Learning Specialist, DAU
- William Thomasson, Director of Learning, DynCorp
- Nancy Williams, Distance Learning Strategist, Booz, Allen & Hamilton
- Jake Werner, Global Account Executive, SkillSoft

At present, the consortium consists of 60 members, representing 30 organizations. In addition to DAU, other member organizations include Booz, Allen & Hamilton; the Erickson Foundation; The George Washington University; Corporate University Enterprise; National Institute of Standards and Technology; Regent University; United States Postal Service; the Pentagon Federal Credit Union; the Patent and Trademark University; Anne Arundel Community

College; United States Bureau of Census; University of Maryland; the Washington Post; the Humane Society of the United States; Northern Virginia Community College; and Johns Hopkins University.

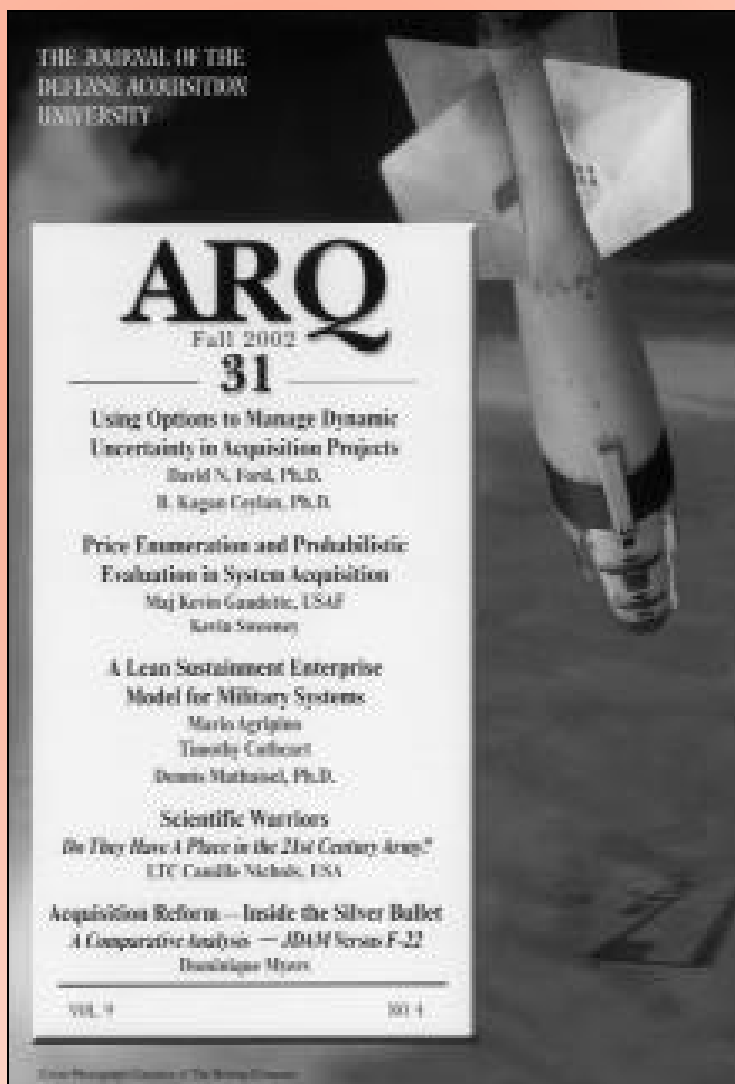
Editor's Note: To learn more about WACUC membership and scheduled activities, visit the WACUC Web site at <http://www.wacuc.com>.

## DAU WEST REGION AND DCMA SAN DIEGO FORM STRATEGIC PARTNERSHIP

Defense Acquisition University (DAU) West Region and Defense Contract Management Agency (DCMA) San Diego signed a Memorandum of Understanding (MOU) on Aug. 20, 2002, taking another step toward fulfilling DAU's mission to build strong and beneficial strategic partnerships with other government agencies, defense industry, and academia. Signing the MOU from left: Jim Rego, DAU Professor; Navy Lt. Cmdr. Susan Randall, DCMA San Diego; and Jeran Binning, DAU Professor and Manager for the Knowledge-Sharing Program.

Photo courtesy DCMA





# CALL FOR AUTHORS & REFEREES

## Call for Authors

The DAU Press is actively seeking quality manuscripts on topics related to Defense acquisition. Topics include opinions, lessons-learned, tutorials, and empirical research.

References must be cited in your bibliography. Research must include a description of the model and the methodology used. The final version of your manuscript must conform to the *Publication Manual of the American Psychological Association* or the *Chicago Manual of Style*.

To obtain a copy of ARQ Guidelines for Authors, visit the DAU Web site (<http://www.dau.mil/pubs/arq/arqart.asp>). To inquire about your manuscript's potential for publication, call the DAU Press at (703) 805-3801 or DSN 655-3801; fax a request to (703) 805-2917, ATTN:

DAU Press (Norene Fagan); or e-mail Norene Fagan at ([norene.fagan-blanch@dau.mil](mailto:norene.fagan-blanch@dau.mil)).

## Call for Referees

We need subject-matter experts for peer reviews of manuscripts during our blind referee process. Please fax your credentials to (703) 805-2917, ATTN: ARQ Editor (Norene Fagan), DAU Press. We will then add you to our referee file.

## Special Call for Research Articles

We publish Defense acquisition research articles that involve systematic inquiry into significant research questions. Each article must produce a new or revised theory of interest to the acquisition community. You must use a reliable, valid instrument to provide measured outcomes.

*Acquisition Review Quarterly* is listed in *Cabell's Directory of Publishing Opportunities in Management and Marketing*.

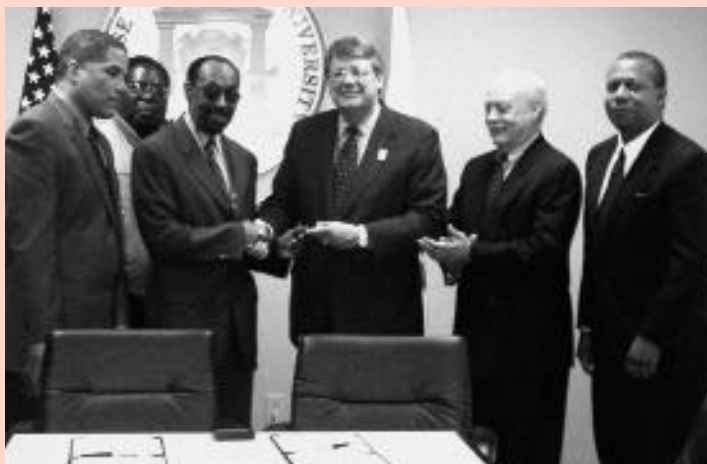
## ATTENTION

**Military Officers  
Defense Industry  
Government Executives  
University Professors  
Graduate Students!**

**THIS IS YOUR  
OPPORTUNITY TO  
CONTRIBUTE TO  
ACQUISITION AND  
LOGISTICS  
EXCELLENCE**

## DAU SOUTH REGION AND HMIRA FORM STRATEGIC PARTNERSHIP

**O**n Jan. 16, 2003, the Defense Acquisition University South Region (DAU), located in Huntsville, Ala., and representatives from Historically Black Colleges and Universities/Minority Institution Research Alliance (HMIRA) signed a Memorandum of Understanding (MOU) agreeing to enter into an educational strategic partnership and leverage mutual learning opportunities.



Signing the MOU from left: Dr. Delbert W. Baker, President, Oakwood College; Dr. Arthur Bond, Dean, School

of Engineering and Technology, Alabama A&M; Hank Valentine, Chief Executive Officer, HMIRA; James L. McCullough, Dean, DAU South Region; Dr. Tim McDonald, Vice President for Instruction Technology, Oakwood College; and Dr. Legand L. Burge, Dean, College of Engineering, Architect-

ture, and Physical Sciences, Tuskegee University. To learn more about DAU's educational strategic partnerships, contact Wayne Glass at [wayne.glass@dau.mil](mailto:wayne.glass@dau.mil).

Photo by Rene' Reid

## PRECISION STRIKE ASSOCIATION HONORS TERRY LITTLE WITH WILLIAM J. PERRY AWARD

**T**he Precision Strike Association at its Winter Roundtable recognized Terry Little—former Air Force Program Director for both the Boeing Joint Direct Attack Munition (JDAM) and the Lockheed Martin Joint Air-to-Surface Standoff Missile (JASSM) programs, and current Director, Kinetic Energy Interceptor Program, Missile Defense Agency—as the recipient of the seventh annual William J. Perry Award. The award was presented to Little on Jan. 23, 2003, at a ceremony held in the Crystal City Marriott, Crystal City, Va.

Given annually by the Precision Strike Association, the William J. Perry Award recognizes leadership or technical achievement that results in significant contributions to the development, introduction, or support of precision strike systems.



From left: Wayne Savage, Chairman of the Board, Precision Strike Association; Dr. William J. Perry, former Secretary of Defense; and Terry Little, Director, Kinetic Energy Interceptor Program, Missile Defense Agency. Little recently joined the Missile Defense Agency from his former position as Director of the Air Force Center of Acquisition Excellence.

Photo by Richard Mattox

# DoD Acquisition Office Recognizes

## Transformational eBusiness Working Group

SGT. 1ST CLASS DOUG SAMPLE, USA

**W**ASHINGTON, Dec. 3, 2002—An expanded electronic government—doing more “eBusiness”—is a cornerstone of President Bush’s management agenda to improve government functions and performance.

Today at a small ceremony at the Pentagon, Michael Wynne, Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics, honored 48 employees who for the past 14 months have been following the president’s plan and transforming the way the Department of Defense does business with private industry.

“One of the most exciting trends in government is the use of information technology together with the Internet to improve virtually everything that we do,” he told the group. “The eBusiness Working Group did a tremendous job, starting with research, then organizing and finally structuring best practices, and creating a clear program to bring us the power of eBusiness. We will become a much more ‘net-centric’ organization in large measure because of the work you have accomplished.”

Since the signing of the president’s management agenda, federal agencies have been scrambling to comply with all or at least part of the e-government initiatives Bush called for—that is, make it simpler for citizens to receive high-quality service from the Federal Government, while reducing the cost of delivering those services.

Managers and supervisors from AT&L and other DoD components comprised the working group, organized in August 2001. The group was called together to spur the implementation of eBusiness across DoD’s acquisition community and

to smooth the way for further cost-effective eBusiness expansion.

Wynne said the group split into four teams and identified more than 30 specific initiatives that targeted improving technology, customer focus, finance, and processes.

“These initiatives provide a solid base on which to build a strong eBusiness foundation,” he said. “The group delivered its final report in October and its work has positioned us to move ahead.”

Wynne also used the occasion to announce the formation of two new AT&L offices: the Internal eBusiness Center, headed by Robert Nemetz, and External eBusiness Center, headed by Mark Krzysko. Nemetz will be responsible for eBusiness implementation within the Undersecretariat to improve organizational effectiveness. Krzysko is to focus on improving electronic interfaces between the private sector and DoD acquisition and logistics organizations.

Editor’s Note: This information is in the public domain at <http://www.defense.link.mil/news>.



Michael Wynne (left), Principal Under Secretary of Defense for Acquisition, Technology and Logistics, presents Melissa Rider a certificate of appreciation Dec. 3, 2002, for her work with a 48-member working group in improving the Defense Department’s eBusiness practices. Taking part in the presentation is Mark Krzysko, newly named head of the AT&L External eBusiness Center, charged with improving electronic interfaces between the private sector and DoD acquisition and logistics organizations.

Photo by Sgt. 1st Class Doug Sample, USA



# PM

**P**rogram Manager Magazine is the ideal forum for publishing your next article on acquisition and logistics excellence, acquisition legislation, or acquisition current policies and practices. You are the subject matter experts—send us your successes, failures, lessons learned, or long-range vision for what may or may not work and why. In the process, gain peer exposure and recognition as a subject matter expert in your field. We want to hear from you and your associates—**today**.

## WHO

- Current and former program managers
- CEOs/CIOs
- Industry executives
- DAU faculty
- Current and former DAU students
- Military acquisition leaders
- Previous PM and ARQ authors
- High-level DoD and industry executives
- Policy makers
- Contracting and finance careerists
- Weapons users in the air, in the field, and at sea

## WHAT

- Hot topics
- Lessons learned
- Op-Ed articles
- Reinventing government
- Speeches and addresses by high-level lecturers
- Interviews with acquisition executives
- Acquisition news
- Changing acquisition paradigms
- Commercial business practices
- Research and development
- Defense industrial base
- Acquisition education

## WHEN: NOW



# CALL FOR AUTHORS

For submission guidelines, contact the editor (703) 805-2892 or visit our Web site at <http://www.dau.mil/pubs/pm/articles.asp>.



## New System to Provide Effective Defense for Ships, Sailors

DAVID NAGLE

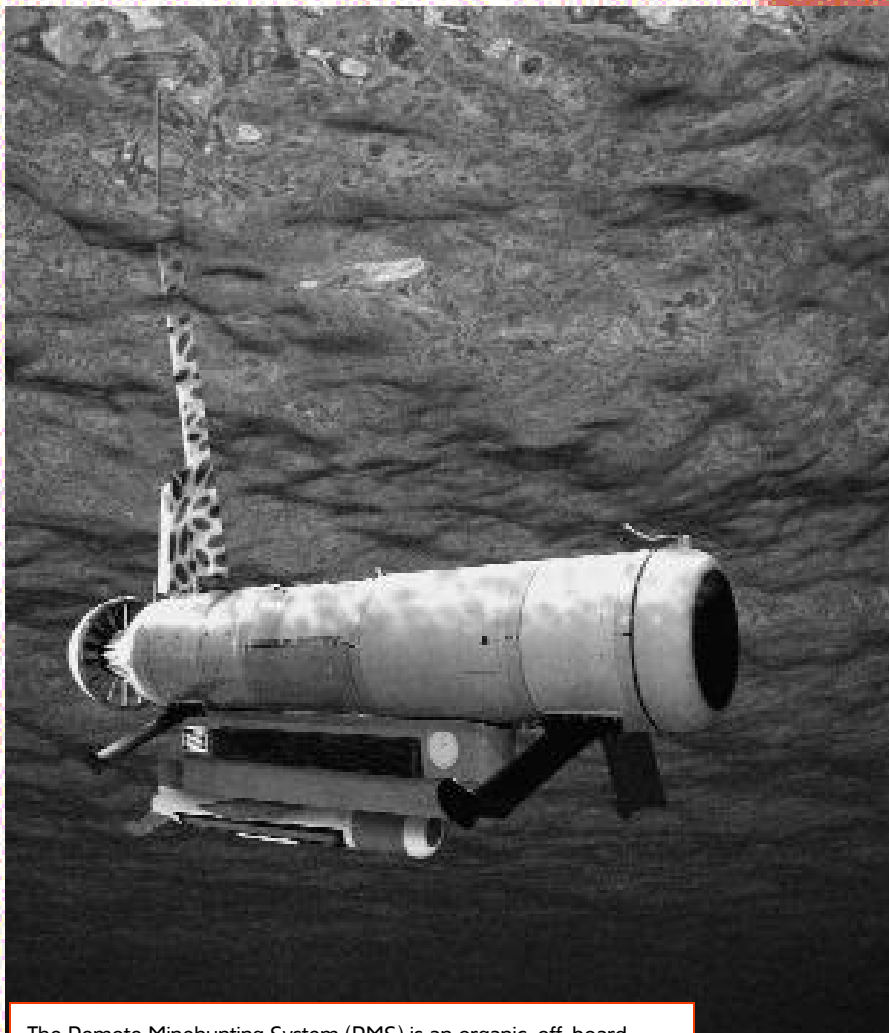
**W**ASHINGTON (NNS)—Since the beginning of the Cold War, more than a dozen U.S. Navy ships have been casualties of mines, such as *USS Samuel B. Roberts* (FFG 58), which nearly sank after striking an Iranian contact mine in 1988.

Today, as naval forces become more expeditionary in nature, the need to dominate the littoral battlespace is critical to success. In order to dominate the littorals, however, navy ships must first effectively locate and either avoid or neutralize mines.

The Remote Minehunting System (RMS) is an organic, off-board mine reconnaissance system offering carrier strike group ships an effective defense against mines by using an unmanned remote vehicle. Lockheed Martin Naval Electronics and Surveillance Systems—Undersea Systems is developing RMS under a contract awarded by the Navy in December 1999.

The Navy has identified mines as one of the two most critical issues facing ships operating in the littorals—waters ranging from the shoreline to depths of 600 feet.

Mines are an inexpensive yet effective means for enemy nations and terrorist organizations to damage or destroy Navy ships and crews. In a



The Remote Minehunting System (RMS) is an organic, off-board mine reconnaissance system that will offer carrier battle group ships an effective defense against mines by using an unmanned remote vehicle. RMS is being designed for installation aboard *Arleigh Burke*-class destroyers. Current plans call for RMS to be first installed aboard the destroyer *USS Pinckney* (DDG 91) in 2004.

Photo courtesy Lockheed Martin

Nov. 30 *Los Angeles Times* article, a veteran minesweeper captain said that mines are "the poor man's weapon of choice: cheap to buy, easy to deploy, and difficult to detect."

"A mine that costs only a couple thousand dollars can cause hundreds of millions of dollars in damage to Navy ships and put the affected ships out of action for months," said Capt. Terry Briggs, RMS program manager. "Since 1950, the Navy has spent hundreds of millions of dollars to repair ship damage by mines, each costing only a few thousand dollars."

RMS will effectively reduce the threat of hidden mines, keeping ships and Sailors safe from harm by detecting, classifying and identifying mines, and recording their precise location for avoidance and/or removal.

"It is potentially a multimission system that can be adapted for additional uses for mine neutralization, anti-submarine warfare, navigational safety, littoral surveillance, and force protection," added Briggs.

The RMS components include a remote mine-hunting vehicle, a semi-submersible, diesel-powered vehicle that tows the AN/AQS-20A minehunting sonar; a mission control and display that integrates RMS into the AN/SOQ-89

undersea warfare system; and a launch and recovery system.

RMS is being designed for installation aboard Arleigh Burke-class, Flight IIA destroyers. Current plans call for RMS to be first installed aboard the destroyer *USS Pinckney* (DDG 91) in 2004.

In addition, Chief of Naval Operations Adm. Vern Clark identified organic mine countermeasures as a critical technology in the "Sea Shield" concept of his *Sea Power 21* vision.

"One of the tenets of Sea Shield is the ability to project defensive power globally through sea and littoral superiority," said Briggs. "RMS provides the organic minehunting capabilities needed to protect forward deployed naval forces, allowing them to dominate the littoral battlespace and achieve and sustain access before and during crises."

For related news, visit the Naval Sea Systems Command Navy NewsStand page at [www.news.navy.mil/local/navsea](http://www.news.navy.mil/local/navsea).

Editor's Note: This information is in the public domain at <http://www.news.navy.mil>.



# Acquisition & Logistics Excellence

An Internet Listing Tailored to the Professional Acquisition Workforce

## Surfing the Net

### Department of Defense

#### Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L))

<http://www.acq.osd.mil/>  
ACQWeb offers a library of USD(AT&L) documents, a means to view streaming videos, and jump points to many other valuable sites.

#### Director, Defense Procurement and Acquisition Policy (DPAP)

<http://www.acq.osd.mil/dpap>  
Procurement and Acquisition Policy news and events; reference library; DPAP organizational breakout; acquisition education and training policy and guidance.

#### DoD Inspector General

<http://www.dodig.osd.mil/pubs/index.html>  
Search for audit and evaluation reports, Inspector General testimony, and planned and ongoing audit projects of interest to the acquisition community.

#### Deputy Director, Systems Engineering, USD (AT&L/IO/SE)

<http://www.acq.osd.mil/io/se/index.htm>  
Systems engineering mission; Defense Acquisition Workforce Improvement Act information, training, and related sites; information on key areas of systems engineering responsibility.

#### Defense Acquisition Deskbook

<http://deskbook.dau.mil>  
Automated acquisition reference tool covering mandatory and discretionary practices.

#### Defense Acquisition History (DAH) Project

<http://www.army.mil/cmhpg/acquisition/acqhome.htm>  
The DAH Project is a multi-year program to produce a detailed history of defense acquisition since 1947, to be published in six volumes. The site features a quarterly online newsletter, project status announcements, acquisition history links, and contact information.

#### Defense Acquisition University (DAU) <http://www.dau.mil>

DAU Course Catalog, *Program Manager* magazine and *Acquisition Review Quarterly* journal; course schedule; policy documents; and training news from the Defense Acquisition Workforce.

#### Defense Acquisition University Distance Learning Courses

<https://dau.mil/registrar/apply.asp>  
Take DAU courses online at your desk, at home, at your convenience!

#### Army Acquisition Corps (AAC)

<http://dacm.rdaisa.army.mil>  
News; policy; publications; personnel demo; contacts; training opportunities.

#### Army Acquisition

<http://acqnet.saalt.army.mil>  
A-MART; documents library; training and business opportunities; past performance; paperless contracting; labor rates.

#### Navy Acquisition Reform

<http://www.ar.navy.mil>  
Acquisition policy and guidance; World-class Practices; Acquisition Center of Excellence; training opportunities.

#### Navy Acquisition, Research and Development Information Center

<http://nardic.onr.navy.mil>  
News and announcements; acronyms; publications and regulations; technical reports; "How to Do Business with the Navy"; much more!

#### Naval Sea Systems Command

<http://www.navsea.navy.mil>  
Total Ownership Cost (TOC); documentation and policy; Reduction Plan; Implementation Timeline; TOC reporting templates; Frequently Asked Questions.

#### Navy Acquisition and Business Management

<http://www.abm.rda.hq.navy.mil>  
Policy documents; training opportunities; guides on areas such as risk management, acquisition environmental issues, past performance, and more; news and assistance for the Standardized Procurement System (SPS) community; notices of upcoming events.

#### Navy Best Manufacturing Practices Center of Excellence

<http://www.bmpcoe.org>  
A national resource to identify and share best manufacturing and business practices being used throughout industry, government, and academia.

#### Space and Naval Warfare Systems Command (SPAWAR)

<https://e-commerce.spawar.navy.mil>  
Your source for SPAWAR business opportunities, acquisition news, solicitations, and small business information.

#### Joint Interoperability Test Command (JITC)

<http://jitc.fhu.disa.mil>  
Policies and procedures for interoperability certification. Access to lessons learned; link for requesting support.

#### Air Force (Acquisition)

<http://www.safaq.hq.af.mil/>  
Policy; career development and training opportunities; reducing TOC; library; links.

#### Air Force Materiel Command (AFMC) Contracting Laboratory's Federal Acquisition Regulation (FAR) Site

<http://farsite.hill.af.mil/>

FAR search tool; *Commerce Business Daily* Announcements (CBDNet); Federal Register; Electronic Forms Library.

#### Defense Systems Management College (DSMC)

<http://www.dau.mil>  
DSMC educational products and services; course schedules; job opportunities.

#### Defense Advanced Research Projects Agency (DARPA)

<http://www.darpa.mil>  
News releases; current solicitations; "Doing Business with DARPA."

#### Defense Information Systems Agency (DISA)

<http://www.disa.mil>  
Structure and mission of DISA; Defense Information System Network; Defense Message System; Global Command and Control System; much more!

#### National Imagery and Mapping Agency

<http://www.nima.mil>  
Imagery; maps and geodata; Freedom of Information Act resources; publications.

#### Defense Modeling and Simulation Office (DMSO)

<http://www.dmsomil>  
DoD Modeling and Simulation Master Plan; document library; events; services.

#### Defense Technical Information Center (DTIC)

<http://www.dtic.mil/>  
Technical reports; products and services; registration with DTIC; special programs; acronyms; DTIC FAQs.

#### Defense Electronic Business Program Office (DEBPO)

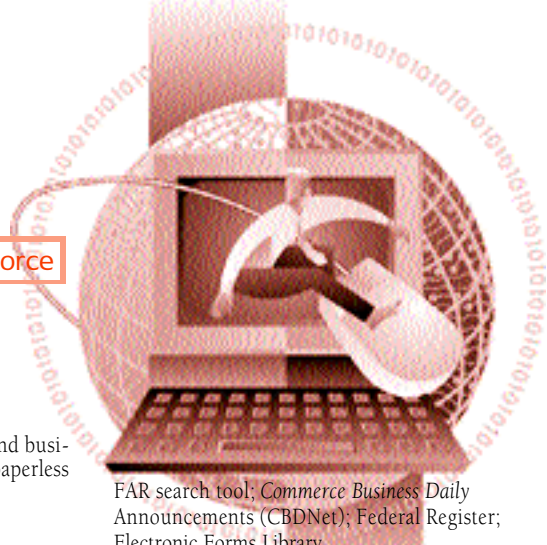
<http://www.defenselink.mil/acq/ebusiness/>  
Policy; newsletters; Central Contractor Registration; Assistance Centers; DoD EC Partners.

#### Open Systems Joint Task Force

<http://www.acq.osd.mil/osjtf>  
Open Systems education and training opportunities; studies and assessments; projects, initiatives and plans; reference library.

#### Government-Industry Data Exchange Program (GIDEP)

<http://www.gidep.corona.navy.mil>  
Federally funded co-op of government-industry participants, providing an electronic forum to exchange technical information essential to research, design, development, production, and operational phases of the life cycle of systems, facilities, and equipment.





# Acquisition & Logistics Excellence

An Internet Listing Tailored to the Professional Acquisition Workforce

## Surfing the Net

### Federal Civilian Agencies

#### Acquisition Reform Network (ARNET)

<http://www.arnet.gov/>  
Virtual library; federal acquisition and procurement opportunities; best practices; electronic forums; business opportunities; acquisition training; Excluded Parties List.

#### Committee for Purchase from People Who are Blind or Severely Disabled

<http://www.jwod.gov>  
Provides information and guidance to federal customers on the requirements of the Javits-Wagner-O'Day (JWOD) Act.

#### Federal Acquisition Institute (FAI)

<http://www.faionline.com>  
Virtual campus for learning opportunities as well as information access and performance support.

#### Federal Acquisition Jump Station

<http://nais.nasa.gov/fedproc/home.html>  
Procurement and acquisition servers by contracting activity; CBDNet; Reference Library.

#### Federal Aviation Administration (FAA)

<http://www.asu.faa.gov>  
Online policy and guidance for all aspects of the acquisition process.

#### General Accounting Office (GAO)

<http://www.gao.gov>  
Access to GAO reports, policy and guidance, and FAQs.

#### General Services Administration (GSA)

<http://www.gsa.gov>  
Online shopping for commercial items to support government interests.

#### Library of Congress

<http://www.loc.gov>  
Research services; Congress at Work; Copyright Office; FAQs.

#### National Technical Information Service (NTIS)

<http://chaos.fedworld.gov/onow/>  
Online service for purchasing technical reports, computer products, videotapes, audiocassettes, and more!

#### Small Business Administration (SBA)

<http://www.SBAonline.SBA.gov>  
Communications network for small businesses.

#### U.S. Coast Guard

<http://www.uscg.mil>  
News and current events; services; points of contact; FAQs.

#### Committee for Purchase From People Who are Blind or Severely Disabled

<http://www.jwod.gov>  
Provides information and guidance to federal customers on the requirements of the Javits-Wagner-O'Day (JWOD) Act.

### Topical Listings

#### MANPRINT (Manpower and Personnel Integration)

<http://www.MANPRINT.army.mil>  
Points of contact for program managers; relevant regulations; policy letters from the Army Acquisition Executive; as well as briefings on the MANPRINT program.

#### DoD Specifications and Standards Home Page

<http://www.dsp.dla.mil>  
All about DoD standardization; key Points of Contact; FAQs; Military Specifications and Standards Reform; newsletters; training; nongovernment standards; links to related sites.

#### Joint Advanced Distributed Simulation (JADS) Joint Test Force

<http://www.jads.abq.com>  
JADS is a one-stop shop for complete information on distributed simulation and its applicability to test and evaluation and acquisition.

#### Program Management Community of Practice (PMCoP)

<http://www.pmcop.dau.mil>  
Includes risk management, contracting, system engineering, total ownership cost (TOC) policies, procedures, tools, references, publications, Web links, and lessons learned.

#### Earned Value Management

<http://www.acq.osd.mil/pm>  
Implementation of Earned Value Management; latest policy changes; standards; international developments; active notebook.

#### Fedworld Information

<http://www.fedworld.gov>  
Comprehensive central access point for searching, locating, ordering, and acquiring government and business information.

#### GSA Federal Supply Service

<http://pub.fss.gsa.gov>  
The No. 1 resource for the latest services and products industry has to offer.

#### Commerce Business Daily

<http://www.govcon.com/>  
Access to current and back issues with search capabilities; business opportunities; interactive yellow pages.

If you would like to add your acquisition or acquisition and logistics excellence-related Web site to this list, please put your request in writing and fax it to Sylvia Gasiorek-Nelson, (703) 805-2917.

### Industry and Professional Organizations

#### DAU Alumni Association

<http://www.dauaa.org>  
Acquisition tools and resources; government and related links; career opportunities; member forums.

#### Electronic Industries Alliance (EIA)

<http://www.eia.org>  
Government Relations Department; includes links to issue councils; market research assistance.

#### National Contract Management Association (NCMA)

<http://www.ncmahq.org>  
"What's New in Contracting?"; educational products catalog; career center.

#### National Defense Industrial Association (NDIA)

<http://www.ndia.org>  
Association news; events; government policy; National Defense magazine.

#### International Society of Logistics

<http://www.sole.org/>  
Online desk references that link to logistics problem-solving advice; Certified Professional Logisticians certification.

#### Computer Assisted Technology Transfer (CATT) Program

<http://catt.bus.okstate.edu>  
Collaborative effort between government, industry, and academia. Learn about CATT and how to participate.

#### Software Program Managers Network

<http://www.spmn.com>  
Site supports project managers, software practitioners, and government contractors. Contains publications on highly effective software development best practices.

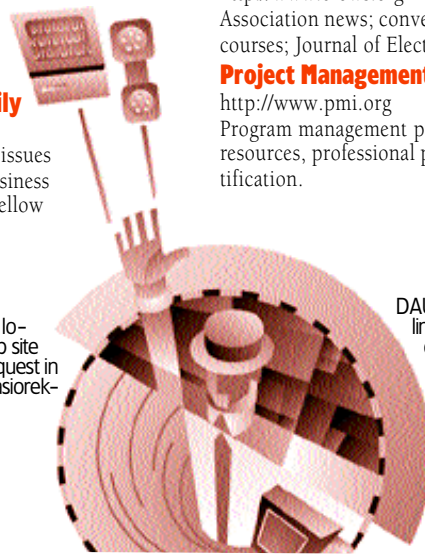
#### Association of Old Crows (AOC)

<http://www.crows.org>  
Association news; conventions, conferences and courses; Journal of Electronic Defense magazine.

#### Project Management Institute

<http://www.pmi.org>  
Program management publications, information resources, professional practices, and career certification.

DAU encourages the reciprocal linking of its Home Page to other interested agencies. Contact the DAU Webmaster at: [webmaster@dau.mil](mailto:webmaster@dau.mil).



# Program Manager Writer's Guidelines in Brief

## <http://www.dau.mil/pubs/pm/articles.asp>

### Purpose

The purpose of *Program Manager* Magazine is to instruct members of the DoD Acquisition, Technology & Logistics (AT&L) Workforce and Defense Industry on policies, trends, legislation, senior leadership changes, events, and current thinking affecting program management and defense systems acquisition, and to disseminate other information pertinent to the professional development and education of the DoD Acquisition Workforce.

### Subject Matter

Subjects may include, but are not restricted to, all aspects of program management; professional and educational development of DoD's AT&L Workforce; acquisition and logistics excellence; Defense industrial base; research and development; test and evaluation; modeling and simulation; commercial best business practices; and interviews with Government-Industry Defense executives.

*Program Manager* is not a forum for academic papers, fact sheets, technical papers, or white papers (these are typically recognized by their structured packaging, e.g., Introduction, Background, Discussion, Methodology, Recommendations, Conclusions). Those papers are more suited for DAU's journal, *Acquisition Review Quarterly*. *Program Manager* Magazine publishes, for the most part, feature stories that include real people and events. Stories that appeal to our readers—who are senior military personnel, civilians, and defense industry professionals in the program management/acquisition business—are those taken from real-world experiences vs. pages of researched information.

Good writing sounds like comfortable conversation. Write naturally and avoid stiltedness. Except for a rare change of pace, most sentences should be 25 words or less, and paragraphs should be six sentences. Vary your syntax. Avoid falling into the trap of writing one declarative sentence after another. Package your article with liberal use of subheads.

### Length of Articles

*Program Manager* is flexible regarding length, but articles most likely to be published are generally 2,000–3,000 words or about 10 double-spaced pages, each page having a 1-inch border on all sides. However, do not be constrained by length requirements; tell your story in the most direct way, regardless of length. Do not submit articles in a layout format, nor should articles include any footnotes, endnotes, or references. *Be sure to define all acronyms.*

### Photos and Illustrations

Articles may include figures, charts, and photographs. They must, however, be in a separate file from the article. Photos must be black and white or color. *Program Manager* does not guarantee the return of photographs. Include brief, numbered captions keyed to the photographs. Place a corresponding number on the lower left corner, reverse side of the pho-

tographs. Also, be sure to include the *source* of the photograph. *Program Manager* publishes no photos from outside the Department of Defense without express permission. Photocopies of photographs are not acceptable.

With the increase in digital media capabilities, authors can now provide digital files of photos/illustrations. These files should be placed on our server via FTP (File Transfer Protocol). (Our author guidelines at <http://www.dau.mil/pubs/pm/articles.asp> contain complete instructions on transferring these files.) Note that they must meet the following publication standards set for *Program Manager*: color and greyscale (if possible); EPS files generated from Illustrator (preferred) or Corel Draw (if in another format, provide program format as well as EPS file); TIFF files with a resolution of 300 pixels per inch; or other files in original program format (i.e., Powerpoint).

### Biographical Sketch

Include a short biographical sketch of the author(s)—about 25 words—including current position and educational background.

### Clearance

All articles written by authors employed by or on contract with the U.S. Government must be cleared by the author's public affairs or security office prior to submission. In addition, each author must certify that the article is a "Work of the U.S. Government." This form is found at the end of the PM Author Guidance. Click on "Copyright Forms" and print the last page only, sign, and submit with the article. Since all articles appearing in *Program Manager* are in the public domain and posted to the DAU Web site, no copyrighted articles will be accepted. This is in keeping with DAU's policy of widest dissemination of its published products.

### Submission Dates

Issue	Author's Deadline
January–February	1 December
March–April	1 February
May–June	1 April
July–August	1 June
September–October	1 August
November–December	1 October

### Submission Procedures

Articles (in MS Word) may be submitted via e-mail to [collie.johnson@dau.mil](mailto:collie.johnson@dau.mil) or via U.S. mail to: DAU PRESS, ATTN C. JOHNSON, 9820 BELVOIR RD, SUITE 3, FORT BELVOIR VA 22060-5565. For photos/illustrations accompanying your article, send us the original photos or follow the guidance under "Photos and Illustrations"—opposite column. All submissions must include the author's name, mailing address, office phone number (DSN and commercial), and fax number.



---

A Bimonthly Magazine  
of the Defense  
Acquisition University